JANUARY 15, 1951

STEEL

The Weekly Magazine of Metalworking

—see page 37

- War Diet for Auto Engines —p. 87
- Shades of '41: Economics of '51 —p. 91
- Fingerlifts Simplify Crate Handling —p. 105

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STEEL
The Weekly Magazine of Metalworking
VOL. 128 NO. 3 JANUARY 15, 1951

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***Next Week*... Conversion—When and How... Spun Neutral Shapes Facilitate Drop Hammer Forging... Rotary Printer Speeds Sheet and Strip Stenciling... How To Apply Cutting Fluids to Machining Operations**

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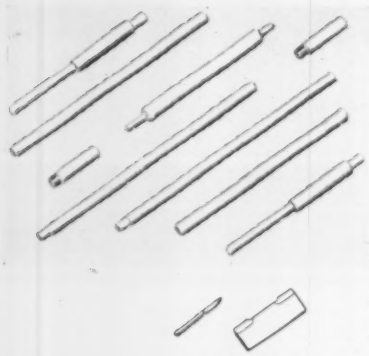

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Behind the Scenes . . .

Steel Buyers' Guide

If you had been upstairs in the editorial precincts last week you would have heard a steady drone emanating from Associate Editor Vance Bell's office. He and Bill Wolfe, a new assistant editor formerly on the staff of an Ohio newspaper, were doing a special proofreading job on the monumental steel buyers' guide that appears this week beginning on page 37.

One would read cards Vance had compiled over the past 10 months in working on the task while the other would check the notations translated into type on the page-proof. It took them nearly six days to check the 44 pages, which bring you a unique guide showing what steel sizes and shapes are produced where and by whom in the U. S.

Extra copies are available for 50 cents each from Readers' Service Department, STEEL, Penton Bldg., Cleveland 13, O. Quotations on quantity orders are given on request.

Chinese Hog Bristles

We're relieved to report that action to assure supplies of imported hog bristles to meet immediate defense and essential civilian needs has been taken by the alert National Production Authority.

A little research reveals that all hog bristles used in this country are imported, with 90 per cent coming from China. Now, of course, imports of Chinese hog bristles have been virtually cut off. Important uses of those bristles are in the production of paint and varnish brushes and dabbing brushes used to manufacture wool clothing.

Thus endeth today's lesson.

Accent on Youth

Tommy Pearce, aged 10, 2409 S. Hayes St., Arlington, Va., wrote this letter to Rr. Adm. A. G. Noble, chief of the Navy's Bureau of Ordnance:

"I think that when you find a way of setting off a bomb by inducing electricity into it, that you should make an atomic torpedo. You could use it in attacking enemy shore batteries. I hope you can use this plan."

A postscript to the letter suggests "you could attack the Communist troops through Japan." Tommy included in his letter a drawing of his torpedo and a strategical sketch showing the 38th parallel in Korea and the line of movement from "wherever you start" to "wherever you attack."

"You could send a small convoy of ships or submarines from America or Japan and make an attack with the atomic torpedo," Tommy pencils on his strategical sketch.

The whole idea was found "very interesting" by the Department of Defense. We found it appalling. It conjures up visions of little ten-year-olds studying logistics instead of spelling in school. We see primers for eight-year-olds explaining the intricacies of the Browning Automatic Rifle; textbooks for teen-agers on the development of antitank weapons.

Happy New Year

Overheard mutterings of a stout gentleman at 11:52 p.m., Dec. 31, 1950: "Hmmmm. Nine more minutes and the new annual income tax rates go into effect."

Puzzle Corner

Four colleges took part in an elimination football tournament—Trinity, Tufts, Temple and Tulane. The winners of the first two games met in the third and final contest to decide the championship. The colors of the teams were brown, red, blue and purple, and the competing captains were Albie, Barry, Bill and Ben, although not necessarily in the order given.

In the final game Albie's team made its only score by a touchdown on the first play but missed the point after touchdown.

The red team lost to Tufts in the first game.

Ben's team defeated Tulane 12 to 0.

The captain of the purple team saved his team from being scoreless in the third game by a 40-yard field goal.

Ben's team did not play Trinity.

Harry's team lost to the undefeated team.

Albie did not see his former friend, the captain of the brown team.

Who defeated whom in the playoff and by what score? Who was the captain of each team. What was each team's color?

Shrdlu

(Metalworking Outlook—page 25)

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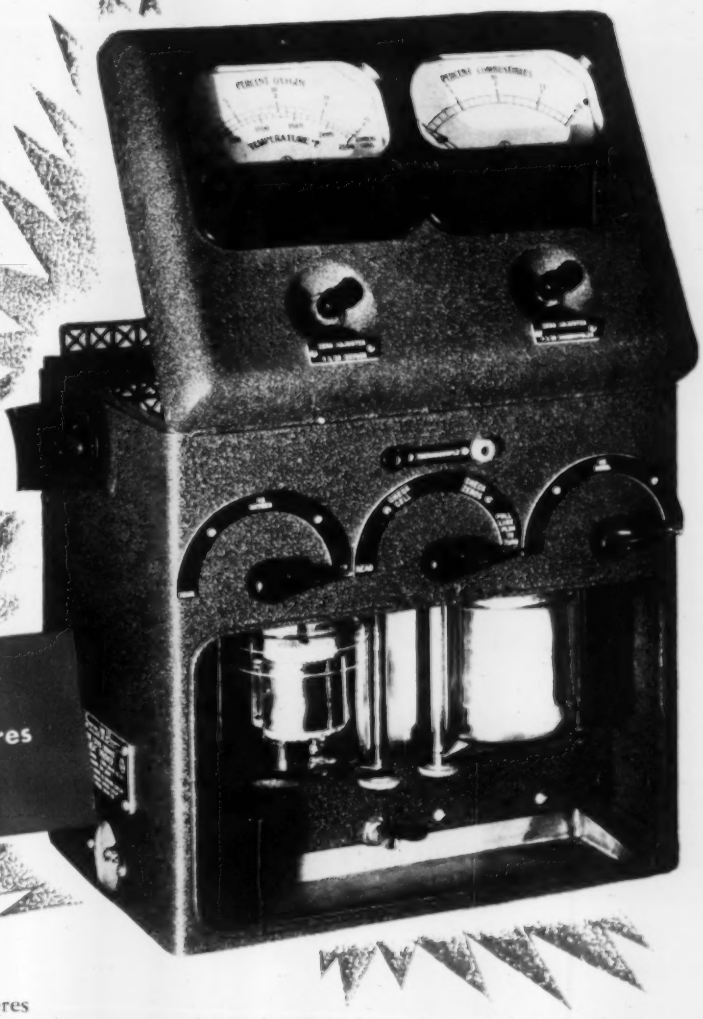

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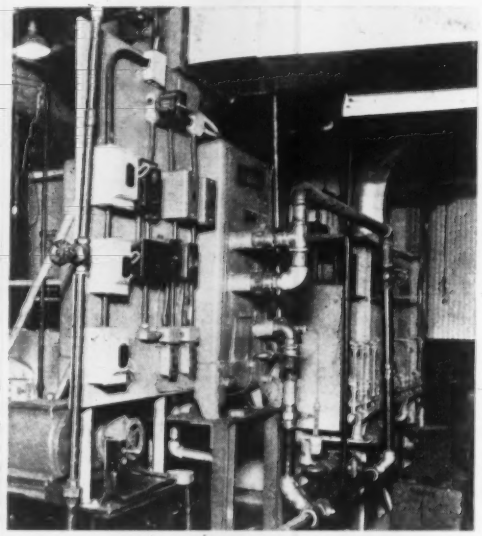

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LETTERS
TO THE EDITORS

12 States Broken Down

I received a piece of advertising matter which shows that 12 states represent 82½ per cent of the metalworking in the entire United States. I wonder if you have the breakdown by States. Would you also advise us if these figures include grey iron and malleable iron as well as steel.

E. C. Tinsley, Manager, Specialty Div. Mexico Refractories Co., Mexico, Mo.

● *The 12 states have the following division of the over 50,000 metalworking plants in the United States, expressed in per cent: New York, 14.2; Illinois, 10.6; California, 10.0; Ohio, 9.1; Michigan, 8.8; Pennsylvania, 7.2; New Jersey, 5.6; Massachusetts, 4.8; Wisconsin, 3.4; Indiana, 3.3; Connecticut, 3.3; Missouri, 2.2. Plants performing all types of metalworking operations are included; grey and malleable iron casting, welding, pickling, galvanizing, etc., show up in the totals.*

STEEL Arrival Big Day in Week

One of the big events here each week is the receipt of STEEL, which keeps me quite well informed on activities in America. It is greatly appreciated, even though it is two weeks old when we receive it.

Chas. L. McGranahan, Technical Assistant to Works Manager Societe Lorraine de Laminage Continu (SOLLAC), Thionville, France

ABC Evokes Comment

I would like to report that I have found the "ABC of Iron and Steel" extremely useful, and the general comments I have received on it have been very, very good. I think the material generally is very well organized and I believe it provides the only up-to-date reference to many processes and practices.

Karl L. Fetters, Assistant to Vice President in Charge of Operations Youngstown Sheet & Tube Co., Youngstown, O.

I have received with great pleasure the magnificent volume entitled "ABC of Iron and Steel". This work, with its many and beautiful illustrations is of great interest and furthers knowledge in the development of the powerful iron and steel industry in the United States and it will occupy a favored place in the library of our association.

Alphonse Diederich, President Association Luxembourgeoise des Ingenieurs et Industriels, Luxembourg

Preserving Cutting Oils

We would appreciate receiving more information in regards to the preservative for soluble-type cutting oils and coolants as described on page 56 of the Dec. 25th issue of STEEL.

H. S. Portman, Purchasing Department Babcock & Wilcox Tube Co., Alliance, O.

● *Information on the additive is obtainable from its maker, West Disinfecting Co., 42-16 West St., Long Island City, N. Y.*

The Metalworking Outlook

Wage, Price Formula by March

No across-the-board wage and price controls are likely until March. Auto men are saying privately that they got the rawest kind of treatment from the government when curbs were put on their prices, but not on steel. Talk of rolling back steel quotations to Dec. 1 levels is disappearing, but don't rule out the possibility of the roll-back date being set at sometime in January. The federal wholesale price index for the week ended Jan. 2 hit 176.7, an all-time high.

Labor Influence Recovering

Labor pressure mounts for a lenient wage control formula. Despite the November election results, labor influence in Washington is still powerful, promises to get stronger as union membership gains. New defense plants will be easy to organize, and many of the workers will be recruited from factories and other sources now unorganized. Some labor leaders favor a wage formula hooked to the cost-of-living index, but opposition to that exists, notably from railroad chieftains.

Search for Substitutes

Get busy on finding substitutes now for steel and other scarce materials. The government will continue to spoon-feed the bad news about mounting materials requirements for defense and essential civilian production. We now have scarcely two weeks' supply of aluminum; all other nonferrous metals are tight. Auto and appliance makers will be paring the trim and gadgets off their models soon to save on materials.

Steel Capacity Climbs

A steelmaking capacity of at least 115 million ingot tons annually by the end of 1952—that's the latest prediction based on more steel expansion plans (p. 35). Our potential now is between 103 and 104 million tons. Rumor has it that still a third steel firm will build a plant along the Delaware river. U. S. Steel and National Steel already have definite plans for the area. New England will get a new steel plant, too. NSRB will permit fast tax writeoff on the facilities' cost.

Comeback in Coal?

Coal will make a big comeback in the years ahead because it constitutes nearly 90 per cent of the potentially recoverable fuel reserves of the U. S. That factor alone will outweigh coal's disadvantages because availability will become increasingly important in a garrison state. Coal reserves total 1.2 trillion tons; 50 per cent of that is bituminous, 19 per cent subbituminous, 30 per cent lignite and 1 per cent anthracite. Watch for new plans for coal gasification and underground burning methods.

Boost for Titanium

Titanium production will be expanded mightily because of a Defense Department order just placed for substantial quantities

Production-Engineering News—p. 101 *The Market Outlook*—p. 123

of the metal. A proportion of the cost will be paid in advance to permit supplies of titanium sponge to expand facilities. Ordnance sees many applications for the metal to replace steel in field equipment, even including small arms where titanium's light weight will enhance portability. Form in which the metal will be supplied, as well as price, will be determined later, as shipment allotments are issued.

Revival in Shipbuilding

Look for a major growth in shipbuilding this year. Expansion won't reach anything like World War II heights, but it will still be large. Maritime Administration will open bids Jan. 31 on 12,500-ton dry-cargo ships with a speed of 20 knots. No more than five ships will be awarded to any one yard; the $350 million congressional appropriation will permit contracts for only about 50 vessels. Standby government shipyards may be reopened soon, particularly in the San Francisco bay area.

New Look at St. Lawrence Plan

Watch for new developments in the old St. Lawrence waterway and power proposal. Steel and ore companies involved in the Labrador ore development project are working for government action. They at last have the Federal Power Commission on their side. FPC, in turning down a New York State project to develop the power portion of the program, says it is recommending that Congress develop a program for both navigation and power on the St. Lawrence river.

Signs of the Times

You may soon have trouble getting shaving cream in collapsible tubes made from tin . . . Look for a sharp increase in the need for enamelware because of stainless steel and aluminum shortages . . . An economical method of refining domestic manganese ore can be developed, says American Chemical Society . . . U. S. Steel Co. and other U. S. Steel subsidiaries are getting set to move into their new Pittsburgh building.

Goings-on in Industry

Civilian production cutbacks are increasing (p. 33) . . . Heavy construction awards hit an alltime high in December (p. 34) . . . Canadians have shipped a steel ingot hot for 200 miles in an experiment that may help save time and money for users of ingots and billets who have no soaking pit facilities (p. 35) . . . The U. S. issues more controls (p. 36) . . . Industry will spend $2.19 billion on new plant and equipment in 1951, says SEC and Commerce (p. 85) . . . A Senate committee report flays the Federal Trade Commission as adding to business confusion and uncertainty (p. 82) . . . War gasoline may mean auto engine design changes (p. 87) . . . We're traveling on an economic path strikingly similar to that followed in 1941 (p. 91).

"Words and Deeds"

In his "state of the union" message President Truman acknowledged the need for debate. He said: "I ask the Congress for unity. . . . I do not ask for an end to debate. Only by debate can we arrive at decisions which are wise and which reflect the desires of the American people. . . . Let us debate the issue, but let every man among us weigh his words and deeds. . . ."

This is sound advice and if the President himself would follow it and set an example for others, progress toward unity would be speeded appreciably. For instance, consider what would happen if the President would "weigh his words and deeds" on one important aspect of the present crisis—government spending.

During the past month, Mr. Truman has referred several times to the necessity of reducing non-essential federal spending. While giving lip service to this desirable objective, he has manifested no enthusiasm for it.

For instance, Senator Harry F. Byrd sent Mr. Truman a letter urging him to lead a movement for economy in government expenditures. He cited chapter and verse as to how non-essential domestic spending could be reduced $7.6 billion in the next fiscal year. He offered to work with the President toward this goal. Mr. Truman accepted the offer and then proved the insincerity of his acceptance by uttering silly statements that Senator Byrd doesn't know anything about budgets and that "expenditures for the general government have never been excessive or extravagant."

This consistent ridiculing of economy is not the act of a man who really welcomes debate and who counsels debaters to weigh their "words and deeds." This is lamentable, because the President, in this hour of crisis, must embrace economy fervently in order to win unity. His pay-as-you-go policy on taxes is sound, but it cannot be pursued unless non-essential spending is cut to the bone. He probably thinks the tax burden can be shouldered chiefly by corporations and rich individuals. Already it is assuming proportions which will impose heavy drains upon the pocketbooks of people in the lower income brackets.

Mr. Truman asked Congress for unity. How can Congress or the people unite under a leader who sneers at economy?

* * *

INFINITE VARIETY: Most steel buyers have a fairly good idea of the companies which sell finished steel products such as sheets, strip, plates, bars, shapes, wire, etc., but how many know accurately the mill locations from which a product of specific dimensions is available! For instance, assume that you are seeking a supplier of sheared hot-rolled plates 1¼ x 66 x 720 inches. There are three suppliers, located in Munhall and Coatesville, Pa., and in Gary, Ind. Or perhaps you wish to know where to buy bobby pin wire. There are 12 suppliers—four in Worcester, Mass.; two in Buffalo; and one each in Alton, Ill.; Cleveland; Fostoria, O.; Newark and Roebling, N. J.; and Struthers, O.

Information of this type, with code numbers by which the names of suppliers can be identified, is presented for the first time in a 44-page "Guide for Steel Buyers" in this issue. It represents a prodigious amount of detailed work on the part of the editors plus 100 per cent cooperation on the part of steel suppliers.

One cannot scan this impressive array of products without realizing that here in the United States steel users have an infinitely greater variety of grades and sizes from which to choose

(OVER)

AS THE EDITOR VIEWS THE NEWS

than is available in any other country in the world. This is largely a result of our system of intense competition. When a manufacturer develops a product which requires steel in volume in a size or form not presently available, suppliers vie to satisfy his needs. —pp. 37, 80

SIMPLE BUT EFFECTIVE: Sometimes an absurdly simple idea can save a lot of money. A case in point is found in the Kankakee, Ill., plant of A. O. Smith Corp. where a simple attachment to a lift truck enables six men to move more crates of water heaters than 22 men could handle by former methods.

The attachment consists of 12 tilting fingers mounted on a horizontal shaft above a vertical apron on the front of the lift truck. When the apron meets a crate, some of the fingers are tilted back by the slats of the crate but others protrude between the slats, engaging a horizontal cleat on the crate and lifting it. In addition to the substantial saving in manpower, this clever stunt eliminates the use of pallets, reduces damage to crates and lowers lift truck maintenance costs. —p. 105

WARFARE BY MACHINE: Seven thousand members of the Society of Automotive Engineers, assembled in annual convention in Detroit last week, listened to a program that was heavily weighted by discussion of the war-productive potentials of the automobile and aircraft industries. Emphasis was placed upon an idealistic concept of warfare wherein men make machines and to a large degree the machines do the fighting. A picture was painted of maximum manpower in industrial plants which turn out fighting machines that will insure minimum waste of manpower on combat duty.

This probably is the pattern for major wars of the future, but it has been applicable only to a limited extent in what is going on in Korea. There machines undoubtedly have spared soldiers' lives, but the mechanical equipment has not been potent enough to relieve the infantryman from the punishment of old-style hand-to-hand fighting. He would welcome the push-button warfare the engineers envision. —pp. 35, 87

VERMICULITE DOES IT: Here is an experiment which may have great possibilities for a few companies. Dominion Iron & Steel Ltd., Sidney, Nova Scotia, shipped a 30,000-pound ingot 200 miles to Trenton, where the Trenton Steel Works Ltd. went to work on it without reheating. It left Sidney in the afternoon with a temperature of 1770 degrees and retained a temperature of 1575 degrees on arrival at Trenton the next morning.

At Sidney the ingot was allowed to solidify in a mold, was stripped and placed in an iron box insulated with premolded vermiculite. The remaining space was filled with loose vermiculite and a steel lid was placed on the box. Vermiculite under heat forms granules containing dead air cells having great insulating value. Its melting point is 2500 degrees, making it fireproof.

Perhaps there is something in this idea for forging companies and other users of ingots and billets which do not have soaking pit facilities. —p. 35

COMMITTEE RAPS FTC: A recent report of the Senate Committee on Interstate & Foreign Commerce criticizes the Federal Trade Commission in terms that will be music to the ears of industrialists who have long suffered from the confusion that exists in regard to the meaning of antitrust legislation.

The report points out that in establishing FTC in 1914, President Wilson expected that it would help to give the business of the country "more explicit legislative definition of the policy and meaning of the existing antitrust law. Nothing hampers business like uncertainty. . . ." The senate report charges that FTC, instead of clearing away confusion, has added to it. The report also points out that when President Truman vetoed the freight absorption bill, he voiced approval of the right to absorb freight and declared clarification of this right could be expected by FTC.

Inasmuch as clarification by FTC has not materialized, the report suggests that Congress again tackle the problem. —p. 82

E. L. Shaner

EDITOR-IN-CHIEF

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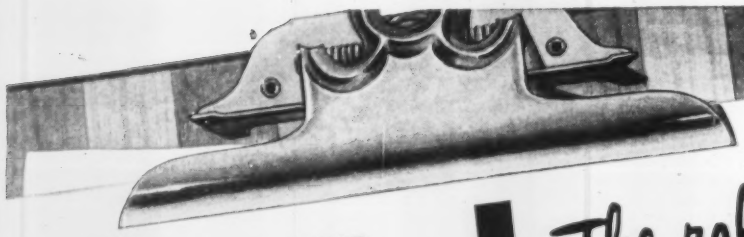


INLAND DATA for STEEL USERS

INLAND STEEL CO.

38 S. Dearborn Street, Chicago 3, Illinois

The role of Scrap in Steel Making

One of the most important raw materials in steelmaking . . . one frequently underrated by the casual observer . . . is iron and steel scrap. With over 90% of all the steel in the U. S. being made by the open hearth process, the scrap used by steel producers totals approximately 50,000,000 tons each year.

The open hearth method of steel production is geared to a pig iron scrap consumption ratio of roughly 50-50. This is to the final advantage of the steel user, since a large scrap diet in steelmaking results in a number of benefits: (a) steel is made faster (since scrap has already been "refined" once before, the "melt" time in the open hearth is decreased); (b) vital raw materials are conserved (it takes almost 4 tons of iron ore, coal and limestone to make a ton of pig iron); (c) unless scrap prices are abnormally high, the price of steel is cheaper; (d) steel is of higher quality (since scrap has already undergone one refining process); (e) transportation facilities, instead of being used for the additional raw materials otherwise required, can be released for other uses; (f) steel mill capacities can be expanded more readily with less emphasis on the blast furnace and more on open hearths and rolling mills.

About two-thirds of the scrap consumed in making steel comes from the steel mills themselves. Crop ends and sheared edges move quickly back to the open hearth shop. The remaining third, flowing to the mills largely through the 6,500 scrap dealers in the U.S., comes from the wastage in metal working plants ("production" scrap), auto graveyards, old building, bridge and ship wrecking projects, railroads (worn rails, freight cars, etc.), neighborhood junk peddlers.

The scrap dealers must sort the scrap so that the undesirables are eliminated, the alloys segregated and the right kinds of scrap can be delivered in large tonnages to the mills for most efficient steelmaking practice.

Today, with steel production at record peaks and with capacity continually expanding, it is more important than ever to keep scrap flowing back to the steel mills from *every* source. Everyone waiting for steel can help himself by assisting the movement of his scrap through his regular channels.

THE SCRAP CYCLE

STEEL
A PENTON PUBLICATION

Civilian Output Cutbacks Snowball

But even if the nonessential volume is cut 50 per cent—unlikely unless World War III begins—1951 production will still exceed the 1939 level

THE CUTBACKS are coming in civilian production. Auto makers, home appliance manufacturers and housing contractors are beginning to feel the pinch as steel, nonferrous metals and component part supplies grow scarcer.

End-use limitations on steel are being considered in Washington. Limitations on the consumption of copper in more than 300 civilian products become effective Mar. 1. Restrictions on aluminum are already in effect. Even if a 50 per cent cutback occurs in all nonessential civilian output in the coming year—the gloomiest prospect—more will be produced in 1951 than in 1939. Although civilian cutbacks in relation to the record 1950 output undoubtedly will occur in the next few months, nonessential production may still match or even surpass 1949 levels, at least in the first half of 1951.

Bleaker and Bleaker—The second-half outlook is bleaker. Military steel needs are climbing rapidly. Last week estimates put them at 2 million tons for the first half. That estimate has been shoved upward again. Expect it to climb steadily in the third and fourth quarters.

Passenger car output in the first half of 1951 may fall no more than 150,000 short of the 3.1 million units turned out in the like period of last year, predicts *Ward's Automotive Reports*. That would be a drop of less than 5 per cent.

Still Good—Although production of major appliances in the first quarter of 1951 will be 15 per cent below that of the fourth quarter of 1950 due to materials restrictions, the rate will still exceed that of the first quarter of 1950 by at least 20 per cent. So says P. J. Newcomb, sales manager of the Electric Appliance Division of Westinghouse Electric Corp. Most appliance makers are working on substitutes for aluminum, copper, nickel and cobalt, says Richard A. Graver, vice president of Admiral Corp.

Builders in coming months will put up fewer new homes and get fewer public construction contracts. But construction of commercial and industrial plants will increase. Requirements of steel for construction will be much larger than had been expected—at least 2 million tons in 1951 for defense and essential civilian building. The bulk of that will go for the steel expansion program.

Pyramiding—Civilian output curtailments are scattered thus far. Here are some of the major ones:

Republic Steel Corp. has curtailed shipments as much as 25 per cent on some steel products to customers producing nonessential goods.

Chrysler, Studebaker and Packard are all curtailing auto production about 20 per cent because of materials shortages and restrictions. The same reasons dictated a cutback to a four-day week at Lincoln-Mercury's Robertson, Mo., plant. Chevrolet civilian cutbacks will be light in the first quarter and will gradually increase thereafter.

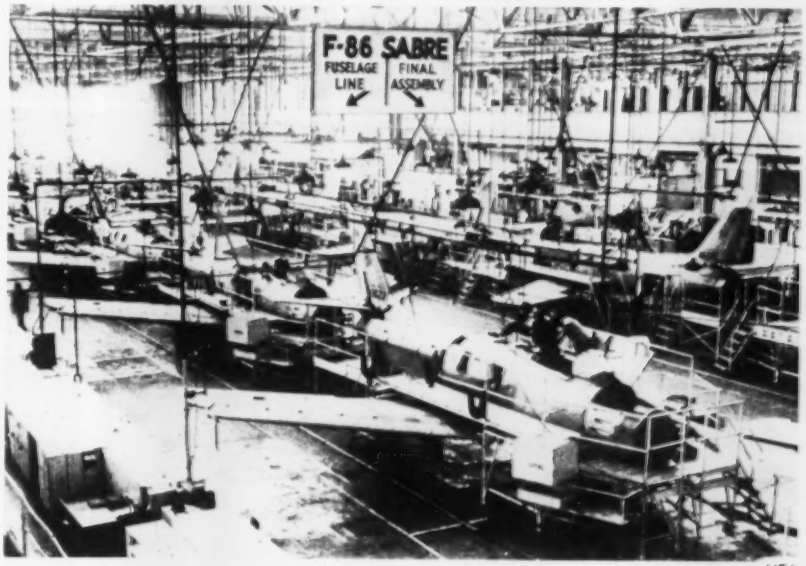
Westinghouse appliance output is down 15 per cent from December at Mansfield, O., and off 20 per cent at Springfield, Mass. Apex Mfg. Co. has laid off nearly 7 per cent of its force making appliances. GE and and Hoover are curtailing vacuum cleaner production. Ekco Products Co. is allocating its entire line of copper-bottomed cooking utensils. Crosley Division of Avco Mfg. Co. laid off nearly 1000 in December because of materials shortages and is forced to cut its appliance production. Frigidaire Division of GM has laid off 2.2 per cent of its Dayton, O., force.

See Cutback in Gas Appliances

Activity of manufacturers in the gas appliance industry, at a new high in all phases during 1950, faces a 20 to 30 per cent cutback in domestic production this year. That is according to present estimates on availability of metals and facilities, says Frederic O. Hess, president, Gas Appliance Manufacturers Association Inc.

Reviewing the industry's 1950 success, Mr. Hess cited figures on domestic gas ranges, where unit shipments passed the 3-million mark for the first time compared to the 2,069,000 of 1949; automatic gas water heaters, where shipments reached 2.3 million for an increase of 56.9 per cent over the 1,466,000 in 1949; and shipments of furnace units in all categories, which reached 3,381,000 compared to the 1949 yearly total of 2,462,000.

The industry bases its hopes for continued effective production on the



NEA

TROUBLE FOR MIG: Latest version of the 650-mile-per-hour F-86A Sabre, now racking up victories over Red Mig-15 jets, is the F-86E Sabre jet fighter rolling off assembly lines at the Inglewood, Calif., plant of North American Aviation Inc. The F-86E is a "super controlled" job that means more trouble for the Reds

OUT OF THE FROZEN NORTH: A workman inserts a steam jet into the side of a railroad car to thaw out the first shipment of frozen ore from the Mesabi range in northern Minnesota. U.S. Steel's Chicago district mills got 50 carloads of the ore—the first time it has been shipped by rail in the winter. Steam passes through the perforated pipe which is inserted in holes in ore cars

fact that it enters this conversion year with more than double the facilities, manpower and productive capacity commanded in 1941.

Job Seekers Seek Defense Work

Already employment offices of automakers are under seige from people seeking work in defense plants. Many of these are coming into the city from West Virginia and Kentucky, most of them being draft-age men. Employment offices at this moment, however, are doing more dismissing than hiring as automobile production suffers under the restraints of materials shortages.

West Scours Labor Markets

Women, oldsters, and handicapped persons will be needed to man production lines of western war plants. So says Glenn E. Brockway, regional director of the California Bureau of Employment Security.

He is chairman of a newly-formed labor-management committee organized to mobilize more defense workers for war plants in California, Nevada, and Arizona. He said 300,000 defense workers will be needed by war plants in the three states by next summer.

U.S. Cuts Paperwork

A combined purchase order-invoice-voucher designed to minimize paperwork on small purchases, speed payment and make it easier for small merchants and others to do business with the government can now be used by all federal agencies.

It's called Standard Form 44 and will be particularly for small purchases of less than $10 but can be used for orders up to $500. For General Services Administration and Department of Defense, Form 44 can be used for orders up to $1000.

Awards At Record High

Heavy construction contract awards for December reached $1,424,619,000, for the largest monthly total on record, according to the *Engineering News-Record*. This figure boosts the final yearly total to another all-time high of $12,351,706,000 and a 51 per cent increase over the 1949 volume.

Yearly increase in physical construction, measured by ENR Construction Volume Index, stayed close behind, rising 46 per cent to a level of 503. This figure is reached on the basis of 1913 equalling 100.

Another record was established when the year's volume of private contracts climbed to $6,670,476,000, an increase of 76 per cent over the 1949 total. A December high was set for awarding public contracts when $1,075,977,000 was reached, pushing the total of the year's public works to $5,681,131,000, or an increase of 32 per cent over 1949. Awards for construction of two atomic energy plants amounting to $760 million was the major cause for the big jump in December volume.

Public building scored an all-time high monthly average in December at $225 million a week and industrial work increased slightly over November, scoring $37.4 million against the $33.3 million of the previous month. All other classes dropped in average. Waterworks were scored at $2.5 million; sewerage at $4.6 million; earthwork, drainage and waterways at $3.1 million; privately financed mass housing at $33 million.

Non-Ferrous Founders Elect

New president of Non-Ferrous Founders Society is J. D. Zaiser, Ampco Metal Co. Inc., Milwaukee. He succeeds Walter M. Clark of D. W. Clark & Co., Boston. The society is located at 127 N. Dearborn St., Chicago 2, Ill.

Toerge: New Engineering Editor

New engineering editor of STEEL is Walter F. Toerge. He succeeds

WALTER F. TOERGE

Jay DeEulis who was recalled to active duty by the Navy.

Mr. Toerge was graduated from the University of Pittsburgh in 1938, later studied metallurgy at Brown University and Pennsylvania State College. He worked for Jones & Laughlin Steel Corp. for four years in the general superintendent's office and the hot-rolled sales department for four years before joining the Army Ordnance Corps. After being discharged with the rank of captain in 1946, he joined STEEL's editorial staff as associate editor.

Conference on Personnel Trends

Personnel managers and general executives of Ohio industries attending the tenth Northern Ohio Personnel and Executive Conference in Cleveland, Jan. 19, will receive in-

formation on latest trends and impending developments in the field of personnel management and labor relations. To be held at Hotel Carter, the conference's discussion leaders will cover recruiting, training and retaining work forces.

Ford Engineer Heads SAE

The Society of Automotive Engineers is being headed this year by Dale Roeder, executive engineer, commercial vehicles, Ford Motor Co. His election occurred last week at the society's annual meeting in Detroit after the society's council took special action to fill the void created by the death last November of President-Elect James E. Hale, engineer for Goodyear Tire & Rubber Co.

Mr. Roeder has been associated with Ford since 1925. During World War II he had charge of all military wheeled and tracklaying vehicles produced by Ford for U. S. Army Ordnance. After the war, he was chief engineer of all commercial vehicles until his promotion to executive engineer in 1949.

Elected to fill Mr. Roeder's unexpired 1950-51 term as SAE councilor was L. Ray Buckendale, vice president of engineering, Timken-Detroit Axle Co.

B. B. Bachman, Autocar Co., was elected treasurer, and E. F. Armstrong, General Motors of Canada Ltd., W. E. Beall, Boeing Airplane Co., and R. F. Lybeck, Esso Standard Oil Co., were chosen as councilors for 1951-52.

Steel Raises Sights Again

Capacity will grow to 115 million tons by end of 1952. Four million added in 1950

WATCH for still more important steel capacity expansion announcements. About two million tons of capacity not yet revealed is projected by steel producers and will raise the industry potential to at least 115 million tons by the end of 1952.

That will mean a 15 million ton increase in three years. Well over 4 million tons of capacity was added in 1950, says the American Iron & Steel Institute, which is now compiling official capacity figures as of Jan. 1, 1951. The total is expected to be close to 104 million tons.

Still Another—Rumors of a third large mill on the Delaware river are circulating among steelmakers. Late last week none of the companies mentioned would admit they are contemplating such a plant. U. S. Steel and National Steel are going ahead with plans for new integrated mills in that area.

New England To Get Steel Plant

A steel plant will be built in New England. National Security Resources Board has issued a certificate of necessity permitting facilities to be written off for tax purposes in five years.

New England Steel Development Corp. had earlier asked the government for authority to build a $250 million plant at New London, Conn., with an annual capacity of 1 million tons. (see STEEL, Jan. 8, p. 29). A loan from Reconstruction Finance Corp. probably would be necessary to finance the construction.

Union Pacific Orders Locomotive

Union Pacific Railroad has ordered 10 gas turbine electric locomotives from General Electric Co.

The units will be similar to a 4500-horsepower locomotive that has been undergoing test on regular freight runs for the last year and a half. Delivery is expected to begin in the latter part of 1951. The contract is the first commercial order for this newest form of rail motive power.

The gas turbine power plant is similar in principle to the power plant in jet planes, except that there is no jet effect as in a plane. In the locomotive, the turbine is connected through reduction gears to electric generators.

Canadians Ship Steel Ingot Hot for 200 Miles

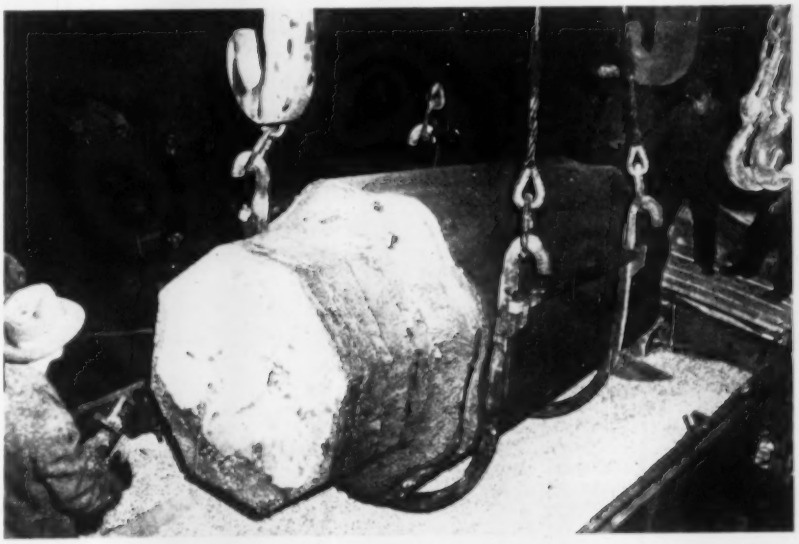
CANADIAN producers have shipped a steel ingot hot for 200 miles in an experiment that may help save time and money for forging companies and other users of ingot and billets who have no soaking pit facilities.

Dominion Iron & Steel Ltd., Sydney, Nova Scotia, shipped by rail one afternoon a 30,000-pound ingot at a temperature of 1770 degrees fahrenheit. When the Trenton, Nova Scotia, plant of Trenton Steel Works Ltd. went to work on it the next morning, it still retained a temperature of 1575 degrees.

Wrapped Up—The ingot was insulated with vermiculite, a mineral of the mica family mined by Zonolite Co., Chicago. Special arrangements were made for the trip by Canadian National Railways, which carried the red-hot cargo all the way.

At the Dominion plant the ingot was allowed to solidify in a mold, was stripped and placed in a cast in a cast iron box insulated with premolded vermiculite. The remaining space was then filled with loose vermiculite and a steel lid placed on the box. That was then fastened and braced to the railway car floor.

Fireproof—When treated with heat, vermiculite ore pops open, forming gold-colored granules containing millions of dead air cells. Those numberless cells permit only the slowest passage of heat, the golden surfaces reflect the heat much as a mirror reflects light. Vermiculite has a melting point of 2500 degrees fahrenheit, making it absolutely fireproof.



DOMINION IRON & STEEL LTD.'s 30,000-POUND INGOT
. . . a 1575-degree temperature the morning after

CHECKLIST ON CONTROLS

Materials Orders

SCRAP—M-20 limits iron and steel scrap inventories held by dealers and brokers, automobile wreckers and producers of scrap. Based on a 60-day period, scrap inventories are to be held to a practical working minimum, or to the level of the preceding 60 days, whichever is less. Companies covered by the order are required to retain for two years records of receipts, deliveries inventories and use of scrap. NPA Order M-20. Effective Jan. 4, 1951.

TIN—Amendment 2 to M-8 permits smelters and refiners of secondary tin to use tin scrap and other secondary tin-bearing materials that result from normal processes in the production of pig tin, alloys and chemicals. Secondary tin is defined as any alloy produced from scrap that contains less than 95 per cent but not less than 1.5 per cent by weight of the element tin. Amendment 2 to M-8. Effective Jan. 9, 1951.

A DIGEST of previous NPA and ESA regulations appears in STEEL, Jan. 8, p. 30. STEEL will carry each week a digest of all regulations put into effect by the various government controls agencies. For complete copies of NPA orders, write to U.S. Commerce Department, Division of Printing Services, attention E. E. Vivian, Room 6225, Commerce Bldg., Washington 25. For ESA orders, write J. L. Miller, Economic Stabilization Agency, Room H367, Temp. E. Bldg., Washington 25.

Priorities

Delegation 6 authorizes the Civil Aeronautics Administration to issue DO ratings to obtain materials and equipment for maintenance and expansion of the civil air transport and the Federal Airways System. NPA Delegation 6. Effective Jan. 4, 1951.

ACCESSORIES—Amendment 3 to NPA Regulation 2 authorizes use of DO Ratings to procure accessories, such as jigs, dies, tools and fixtures, where necessary to production of rated orders on schedule. Amendment 3 to NPA Regulation 2.

NPA Sets Up Conversion Bureau

The National Production Authority has established a Facilities & Construction Bureau designed to aid defense construction and its related industrial expansion. Frank R. Creedon was named administrator.

Mr. Creedon, who previously has been director of the NPA Facilities Clearance Staff, set up five divisions within the new bureau to cover industrial expansion, tax amortization, loans, building materials and construction controls.

Canada Controls Metals

C. D. Howe, Canadian minister of trade and commerce, has created a nonferrous metal division to be headed by Frank V. C. Hewett.

The Canadian step follows complaints by U. S. officials at the dominion's reluctance to follow the U. S. system of imposing controls.

Watch Out for Radiations

Are you manufacturing or using equipment that generates excessive electromagnetic radiations — motors, switches, welding sets and a host of other items?

If so, your attention to this condition will be brought in forceful terms if and when Congress legislates a bill submitted by the Department of Defense. It authorizes the President "to control all types of electromagnetic radiations that might be used to guide an enemy plane or missile in an attack on the United States." The control would extend to anything "capable of emitting electromagnetic radiations between ten thousandths and one hundred thousand (0.010-100,000) megacycles per second."

More Metals Consultants

Metals consultants employed on the pricing staff of the Economic Stabilization Agency, Washington, are: Sam Ewing, Youngstown Steel & Alloy Co.; William F. Sterling, American Steel & Wire Co., Cleveland; Hiram Winternitz, retired president, Charles Dreifuss & Co., Philadelphia; Irwin Cornell, retired executive vice president, St. Joseph Lead Co., New York; Ed Metzer, formerly manager of the Superior plant of Wellman Bronze & Aluminum Co., Cleveland; Ivon Ulrey, College of Commerce, Ohio State University, Columbus, O. More consultants from the metals industry are to be added shortly. All can be reached on the ESA telephone, STerling 4200.

Why Higher Taxes Are Needed

Why all authorities in Washington agree more taxes are needed by the Federal government is indicated by the heavy appropriations made by the 81st Congress in 1950 and by the outlook for still larger appropriations in 1951. The 1950 record:

Urgent Deficiency	$739,653,500
Omnibus bill:	
Agriculture	773,208,924
Army Civil Functions	687,043,270
District of Columbia	19,800,000
Foreign Aid	4,387,373,729
Independent Offices	7,996,140,947
Interior	620,396,325
Labor-Federal Security	2,272,428,614
Legislative	69,290,211
Military Establishment	13,294,299,433
State, Justice, Commerce, Judiciary	1,065,627,962
Treasury-Post Office	[1]1,076,846,000
Deficiency	653,761,608
District of Columbia	118,049,256
Supplemental, 1951	17,099,902,285
Second Supplemental, 1951	19,841,412,938

This table includes only cash appropriations.
[1] The total of the Post Office appropriations is $2,207,500,000 payable from postal revenues to the extent such funds become available and the remainder from the Treasury. Estimated revenue is $1,681,000,000.

WHEN THE U. S. SUPREME COURT issued its famous Cement Case Decision in 1948 knocking out the multiple basing point system of quoting prices, the steel industry went over to mill pricing, thus making every production point a pricing point.

Market Editor Bill Rooney explained mill pricing and the way it would affect industry in a special 16-page report in the Sept. 27, 1948, issue of STEEL. And, in the same issue, STEEL introduced the new system for the first time by publishing prices quoted by individual steel companies at each point of production. Today, STEEL regularly publishes over 2300 quotations on steel, the nonferrous metals and related products.

STEEL's price section (starting on page 124 this week) actually comprises a directory telling you who makes what products—and where. But, many of you also have been asking: "Who makes what sizes?" So, in the "Guide for Steel Buyers" on the following 44 pages you now will find the answers to literally thousands of questions relating to sizes of carbon and silicon steel products.

Associate Editor Vance Bell and Bill Kellogg of our art department have been working on the Guide for many months with the able assistance of STEEL's field editors. For the steel industry, too, it has been a big job in assembling the necessary information—in many cases requiring policy decisions.

You will find it easy to determine the plant locations and names of producers of each size of product. Other uses for the Guide will be suggested also, as in the case of the executive who says his company will use the data in locating new plants.

Reprints of the Guide are available from STEEL's Readers Service Department, 1213 West 3rd Street, Cleveland 13, at these prices: one to nine copies, 50 cents each; ten to 24, 40 cents; 25 to 49, 35 cents 50 or more, 30 cents.

Irwin H. Such, Editor

A SPECIAL REPORT BY THE EDITORS OF **STEEL**
A PENTON PUBLICATION

January 15, 1951

Guide for Steel Buyers

This guide prepared by the editors of STEEL is designed to make it easy for you to locate sources for carbon and silicon steel products. On the following pages you will find each product listed together with the sizes available, where they are produced and a simple code for identifying each company. The guide should be used in conjunction with the market section of STEEL each week which lists the latest f.o.b. prices quoted by various steel companies.

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How To Use the Guide

This guide shows the range of sizes of carbon and silicon steel products produced by various U. S. steel mills. Check on the following pages for the type and size product you need and then find the names of the producers by referring to the code on this page. Base prices of the products will be found in the market section of STEEL each week.

SHEETS—Widths given for hot-rolled and cold-rolled sheets are maximums rolled at the various mills. Hot-rolled sheets, as customarily defined, are over 12 inches in width and thinner than 0.23-inch (or No. 4 gage). Cold-rolled sheets, as customarily defined, are over 12 inches in width but not over 32 inches when thickness is 0.0142-inch (No. 28 gage) and heavier. When cold-rolled sheets are 0.0141-inch and thinner they can be over 32 inches in width.

STRIP—The guide shows minimum and maximum widths of strip produced by the various mills. For strip in coils, also check producers of coil sheets, who may be able to fill requirements by slitting.

PLATES—Plates ordinarily are over 6 inches in width when 0.23-inch and thicker. However, a product 0.18-inch and thicker and over 48 inches in width also is classified as plate.

BARS—Where range of thickness and widths are shown for flat bars it does not mean necessarily that the minimum thickness and maximum width can be obtained in one bar.

MECHANICAL TUBING—Minimum and maximum ODs are not necessarily available in the whole range of wall thicknesses listed. The minimum and maximum ODs are often dependent on wall thicknesses.

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Cut lengths	75
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Coils	75
Cut lengths	75
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Coils	75
Cut lengths	75
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Coils	76
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Key to Producing Companies

A
A1 Acme Steel Co.
A2 Agaloy Tubing Co.
A3 Alan Wood Steel Co.
A4 Allegheny Ludlum Steel Corp.
A7 American Steel & Wire Co.
A8 Angell Nail & Chaplet Co.
A10 Armco Steel Corp.
A11 Atlantic Steel Co.
A14 Athenia Steel Division, National-Standard Co.

B
B2 Bethlehem Steel Co.
B3 Bethlehem Pacific Coast Steel Corp.
B4 Blair Strip Steel Co.
B5 Bliss & Laughlin Inc.
B6 Boiardi Steel Corp.
B9 Brainard Steel Co.
B12 Buffalo Steel Co.
B13 Bundy Tubing Co.
B14 A. M. Byers Co.

C
C1 California Cold Rolled Steel Corp.
C5 Central Iron & Steel Div., Barium Steel Corp.
C6 Chicago Steel & Wire Co.
C8 Cold Metal Products Co.
C10 Colorado Fuel & Iron Corp.
C11 Columbia Steel Co.
C12 Columbia Steel & Shafting Co.
C16 Continental Steel Corp.
C17 Copperweld Steel Co.
C18 Cumberland Steel Co.
C20 Cuyahoga Steel & Wire Co.
C21 California Wire Cloth Corp.

D
D1 Davis Wire & Cable Corp.
D2 Detroit Steel Corp.
D3 Detroit Tube & Steel Div., Sharon Steel Corp.
D4 Disston & Sons Inc., Henry
D5 Driscoll Wire Co.

E
E5 Elliott Bros. Steel Co.
E6 Empire Steel Corp.

F
F3 Fitzsimons Steel Co.
F4 Follansbee Steel Corp.
F7 Ft. Howard Steel & Wire Div., Research Parts & Engineering Corp.

G
G1 Geneva Steel Co.
G3 Globe Steel Tubes Co.
G4 Granite City Steel Co.
G5 Great Lakes Steel Corp.
G6 Greer Steel Co.

H
H6 Hind Steel Co. Inc.

I
I-1 Igoe Bros. Inc.
I-2 Inland Steel Co.

J
J4 Johnson Steel & Wire Co. Inc.
J5 Jones & Laughlin Steel Corp.
J7 Judson Steel Corp.

K
K1 Kaiser Steel Corp.
K3 Keystone Drawn Steel Co.
K4 Keystone Steel & Wire Co.
K5 Kidd Drawn Steel Co.
K6 Knoxville Iron Co.

L
L1 Laclede Steel Co.
L2 LaSalle Steel Co.
L7 Lukens Steel Co.

M
M1 McLouth Steel Corp.
M2 Macwhyte Co.
M3 Madison Wire Co. Inc.
M5 Medart Co.
M7 Michigan Seamless Tube Co.
M8 Mid-States Steel & Wire Co.
M12 Moltrup Steel Products Co.
M13 Monarch Steel Co. Inc.
M15 Mark & Co., Clayton

N
N2 National Supply Co.
N5 Nelsen Steel & Wire Co.
N6 New England High Carbon Wire Co.
N8 Newman-Crosby Steel Co.
N9 Newport Steel Corp.
N12 Niles Rolling Mill Co.
N14 Northwest Steel Rolling Mills Inc.
N15 Northwestern Steel & Wire Co.

O
O2 Ohio Seamless Tube Co.
O4 Oregon Steel Mills

P
P1 Pacific States Steel Corp.
P2 Pacific Tube Co.
P5 Pilgrim Drawn Steel Div., Automotive Materials Corp.
P7 Pittsburgh Steel Co.
P8 Pittsburgh Tool Steel Wire Co.
P9 Pittsburgh Tube Co.
P11 Pollak Steel Co.
P13 Precision Drawn Steel Co.
P18 Prentiss & Co., Geo. W.

R
R1 Reeves Steel & Mfg. Co.
R2 Republic Steel Corp.
R3 Rhode Island Steel Corp.
R5 Roebling's Sons Co., John A.
R6 Rome Strip Steel Co. Inc.
R7 Rotary Electric Steel Co.

S
S1 Seneca Wire & Mfg. Co.
S2 Service Steel Co.
S3 Sharon Steel Corp.
S5 Sheffield Steel Corp.
S14 Standard Tube Co.
S15 Stanley Works
S17 Superior Drawn Steel Co.
S19 Sweet's Steel Co.
S21 Shenango Tube Co.
S22 Summerill Tubing Co. Div., Columbia Steel & Shafting Co.
S23 Superior Tube Co.

T
T4 Texas Steel Co.
T5 Thomas Steel Co.
T6 Thompson Wire Co.
T7 Timken Roller Bearing Co.
T8 Toledo Steel Tube Co.
T12 Tube Reducing Corp.

U
U5 United States Steel Co.

V
V4 Van Huffel Tube Co.

W
W1 Wallace Barnes Co.
W2 Wallingford Steel Co.
W3 Washburn Wire Co.
W6 Weirton Steel Co.
W8 Western Automatic Machine Screw Co.
W9 Wheatland Tube Co.
W10 Wheeling Steel Corp.
W11 Wickwire Bros. Inc.
W12 Wickwire Spencer Steel Div., Colorado Fuel & Iron Corp.
W13 Wilson Steel & Wire Co.
W14 Wisconsin Steel Div., International Harvester Co.
W16 Worth Steel Co.
W18 Wyckoff Steel Co.
W19 Worcester Pressed Steel Co.
W20 Worcester Wire Works Div., National-Standard Co.

Y
Y1 Youngstown Sheet & Tube Co.

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Sheets, Coil stock

Mfrs. Std. Gage	Max. Width (in.)	Mill Point, Producer
2	25	Conshohocken,Pa. A3
3	25	Conshohocken,Pa. A3
4	16¾	Fontana, Calif. K1
4	25	Conshohocken,Pa. A3
4	49	Dravosburg,Pa. U5
4	49	Gary,Ind. U5
5	16¾	Fontana,Calif. K1
5	22	Sharon,Pa. S3
5	25	Conshohocken,Pa. A3
5	49	Dravosburg,Pa. U5
5	49	Gary,Ind. U5
6	18½	Weirton,W.Va. W6
6	22	Sharon,Pa. S3
6	25	Conshohocken,Pa. A3
6	38	Youngstown U5
6	48	Fontana,Calif. K1
6	49	Dravosburg,Pa. U5
6	49	Gary,Ind. U5
6	60	Geneva,Utah G1
6	60	Pittsburg,Calif. C11
7	19½	Weirton,W.Va. W6
7	22	Sharon,Pa. S3
7	25	Conshohocken,Pa. A3
7	38	Youngstown U5
7	38½	Butler,Pa. A11
7	60	Geneva,Utah G1
7	60	Pittsburg,Calif. C11
7	72	Fontana,Calif. K1
7	73	Dravosburg,Pa. U5
7	73	Gary,Ind. U5
7	90	Pittsburgh J5
7 and hvr.	36	Warren,O. R2
7 and hvr.	90	Cleveland R2
8	19½	Weirton,W.Va. W6
8	22	Sharon,Pa. S3
8	25	Conshohocken,Pa. A3
8	36	Trenton,Mich. M1
8	36	Warren,O. R2
8	38	Youngstown U5
8	38½	Butler,Pa. A10
8	60	Geneva,Utah G1
8	60	Pittsburg,Calif. C11
8	72	Fontana,Calif. K1
8	73	Dravosburg,Pa. U5
8	73	Gary,Ind. U5
8	90	Cleveland R2
8	90	Pittsburgh J5
9	17	Detroit M1
9	21½	Weirton,W.Va. W6
9	22	Sharon,Pa. S3
9	25	Conshohocken,Pa. A3
9	36	Trenton,Mich. M1
9	38	Youngstown U5
9	60	Geneva,Utah G1
9	60	Pittsburg, Calif. C11
9	72	Fontana,Calif. K1
9	72	IndianaHarbor,Ind. I-2
9	73	Dravosburg,Pa. U5
9	73	Gary,Ind. U5
9	90	Cleveland R2
9	90	Pittsburgh J5
9 and hvr.	60	SparrowsPt.,Md. B2
10	17	Detroit M1
10	21½	Weirton,W.Va. W6
10	22	Sharon,Pa. S3
10	25	Conshohocken,Pa. A3
10	36	Trenton,Mich. M1
10	36	Warren,O. R2
10	38	Youngstown U5
10	38½	Butler,Pa. A10
10	60	Geneva,Utah G1
10	60	Pittsburg,Calif. C11
10	60	SparrowsPoint,Md. B2
10	72	Fontana,Calif. K1
10	72	IndianaHarbor,Ind. I-2
10	73	Dravosburg,Pa. U5
10	73	Gary,Ind. U5
10	90	Cleveland R2
10	90	Pittsburgh J5
11	17	Detroit M1
11	21½	Weirton,W.Va. W6
11	22	Sharon,Pa. S3
11	25	Conshohocken,Pa. A3
11	36	Trenton,Mich. M1
11	36	Warren,O. R2
11	38	Youngstown U5
11	38½	Butler,Pa. A10
11	54	Steubenville,O. W10
11	60	Geneva,Utah G1
11	60	Pittsburg,Calif. C11
11	66	Fontana,Calif. K1
11	72	IndianaHarbor,Ind. I-2
11	73	Dravosburg,Pa. U5
11	73	Gary,Ind. U5
11	90	Cleveland R2
11	90	Pittsburgh J5
12	19	Weirton,W.Va. W6
12	22	Sharon,Pa. S3
12	23	Conshohocken,Pa. A3
12	36	Trenton,Mich. M1
12	36	Warren,O. R2
12	38	Youngstown U5
12	38½	Butler,Pa. A10
12	54	Steubenville,O. W10
12	60	Fontana,Calif. K1
12	60	Geneva,Utah G1
12	60	Pittsburg,Calif. C11
12	60	SparrowsPoint,Md. B2
12	72	IndianaHarbor,Ind. I-2
12	73	Dravosburg,Pa. U5
12	73	Gary,Ind. U5
12	87	Cleveland R2
12	90	Pittsburgh J5
12 and hvr.	72	Lackawna,N.Y. B2
13	18	Weirton,W.Va. W6
13	20	Conshohocken,Pa. A3
13	22	Sharon,Pa. S3
13	36	Trenton,Mich. M1
13	36	Warren,O. R2
13	38	Youngstown U5
13	38½	Butler,Pa. A10
13	48	Fontana,Calif. K1
13	48	IndianaHarbor,Ind. I-2
13	48	Wilders,Ky. N9
13	49	Geneva,Utah G1
13	49	Pittsburg,Calif. C11
13	51	Steubenville,O. W10
13	60	Lackawanna,N.Y. B2
13	60	SparrowsPoint,Md. B2
13	73	Dravosburg,Pa. U5
13	73	Gary,Ind. U5
13	76	Cleveland R2
13	84	Pittsburgh J5
13 and hvr.	80	Ecorse,Mich. G5
14	17	Weirton,W.Va. W6
14	18	Conshohocken,Pa. A3
14	18	Sharon,Pa. S3
14	32	Trenton,Mich. M1
14	36	Fontana,Calif. K1
14	36	Warren,O. R2
14	38	Youngstown U5
14	38½	Butler,Pa. A10
14	48	IndianaHarbor,Ind. I-2
14	49	Geneva,Utah G1
14	49	Pittsburg,Calif. C11
14	50	Steubenville,O. W10
14	54	SparrowsPoint,Md. B2
14	60	Lackawanna,N.Y. B2
14	64	Ecorse,Mich. G5
14	67	Dravosburg,Pa. U5
14	67	Gary,Ind. U5
14	70	Cleveland R2
14	76	Pittsburgh J5
15	13½	Weirton,W.Va. W6
15	16	Conshohocken,Pa. A3
15	16	Sharon,Pa. S3
15	36	Warren,O. R2
15	38	Youngstown U5
15	38½	Butler,Pa. A10
15	48	IndianaHarbor,Ind. I-2
15	48	Lackawanna,N.Y. B2
15	48	SparrowsPoint,Md. B2
15	48	Steubenville,O. W10
15	49	Geneva,Utah G1
15	49	Pittsburg,Calif. C11
15	60	Ecorse,Mich. G5
15	61	Cleveland R2
15	61	Dravosburg,Pa. U5
15	61	Gary,Ind. U5
15	66	Pittsburgh J5
16	16	Conshohocken,Pa. A3
16	16	Sharon,Pa. S3
16	36	Butler,Pa. A10
16	36	Warren,O. R2
16	38	Youngstown U5
16	48	Ecorse,Mich. G5
16	48	IndianaHarbor,Ind. I-2
16	48	Lackawanna,N.Y. B2
16	48	SparrowsPoint,Md. B2
16	48	Steubenville,O. W10
16	49	Geneva,Utah G1
16	49	Pittsburg,Calif. C11
16	58	Cleveland R2
16	60	Pittsburgh J5
16	61	Dravosburg,Pa. U5
16	61	Gary,Ind. U5
17	30	Warren,O. R2
17	32	Butler,Pa. A10
17	36	IndianaHarbor,Ind. I-2
17	38	Youngstown U5
17	42	SparrowsPoint,Md. B2
17	46	Cleveland R2
17	49	Dravosburg,Pa. U5
17	49	Gary,Ind. U5
17	56	Pittsburgh J5
18	30	Warren,O. R2
18	32	Butler,Pa. A10
18	36	IndianaHarbor,Ind. I-2
18	38	Youngstown U5
18	42	SparrowsPoint,Md. B2
18	46	Cleveland R2
18	48	Pittsburgh J5
18	49	Dravosburg,Pa. U5
18	49	Gary,Ind. U5

Hot-Rolled Sheets, Cut lengths

Mfrs. Std. Gage	Max. Width Max. Length (inches)	Mill Point, Producer
4	16¾ x252	Fontana,Calif. K1
4	38x360	Youngstown U5
4	48x96	Newport,Ky. N9
4	48x168	Youngstown Y1
4	48x900	Munhall,Pa. U5
4	49x300	Gary,Ind. U5
4	49x354	Dravosburg,Pa. U5
4	60x220	Ashland,Ky. A10
5	16¾ x252	Fontana,Calif. K1
5	38x360	Youngstown U5
5	48x108	Newport,Ky. N9
5	48x168	Youngstown Y1
5	48x900	Munhall,Pa. U5
5	49x300	Gary,Ind. U5
5	49x354	Dravosburg,Pa. U5
5	60x220	Ashland,Ky. A10
6	20x240	Sharon,Pa. S3
6	25x300	Conshohocken,Pa. A3
6	36x240	Trenton,Mich. M1
6	38x360	Youngstown U5
6	48x120	Newport,Ky. N9
6	48x240	Fontana,Calif. K1
6	48x900	Munhall,Pa. U5
6	49x300	Gary,Ind. U5
6	49x354	Dravosburg,Pa. U5
6	60x240	Ashland,Ky. A10
6	72x168	Youngstown Y1
6 and heavier	90x360	Cleveland R2
6 and heavier	90x480	Pittsburgh J5
7	20x240	Sharon,Pa. S3
7	25x300	Conshohocken,Pa. A3
7	36x156	Newport,Ky. N9
7	36x240	Trenton,Mich. M1
7	38x360	Youngstown U5
7	48x102	Torrance,Calif. C11
7	48x144	Newport,Ky. N9
7	54x192	Steubenville,O. W10
7	60x240	Ashland,Ky. A10
7	72x168	Youngstown Y1
7	72x240	Cleveland J5
7	72x240	Fontana,Calif. K1
7	72x240	IndianaHarbor,Ind. I-2
7	73x300	Gary,Ind. U5
7	73x354	Dravosburg,Pa. U5
7	78x600	Munhall,Pa. U5
7	84x540	Munhall,Pa. U5
7	88½ x240	SouthChicago,Ill. U5
7	90x240	Cleveland R2
7	90x480	Munhall,Pa. U5
7	90x480	Pittsburgh J5
7 and heavier	36x600	Warren,O. R2
8	20x240	Sharon,Pa. S3
8	25x300	Conshohocken,Pa. A3
8	36x156	Newport,Ky. N9
8	36x240	Trenton,Mich. M1
8	36x600	Warren,O. R2
8	38x360	Youngstown U5
8	48x110	Torrance,Calif. C11
8	48x144	Newport,Ky. N9
8	50x96	Torrance,Calif. C11
8	54x192	Steubenville,O. W10
8	60x240	Ashland,Ky. A10
8	72x168	Youngstown Y1
8	72x240	Cleveland J5
8	72x240	Fontana,Calif. K1
8	72x240	IndianaHarbor,Ind. I-2
8	73x300	Gary,Ind. U5
8	73x354	Dravosburg,Pa. U5
8	78x600	Munhall,Pa. U5
8	84x480	Munhall,Pa. U5
8	88½ x240	SouthChicago,Ill. U5
8	90x240	Cleveland R2
8	90x360	Munhall,Pa. U5
8	90x480	Pittsburgh J5
9	20x240	Sharon,Pa. S3
9	25x300	Conshohocken,Pa. A3
9	36x156	Newport,Ky. N9
9	36x240	Trenton,Mich. M1
9	36x600	Warren,O. R2
9	38x360	Youngstown U5
9	38½ x240	Butler,Pa. A10
9	48x120	Torrance,Calif. C11
9	48x144	Newport,Ky. N9
9	50x96	Torrance,Calif. C11
9	54x192	Steubenville,O. W10
9	60x240	Ashland,Ky. A10
9	60x500	Munhall,Pa. U5
9	72x168	Youngstown Y1
9	72x240	Cleveland J5
9	72x240	Fontana,Calif. K1
9	72x240	IndianaHarbor,Ind. I-2
9	73x300	Gary,Ind. U5
9	73x354	Dravosburg,Pa. U5
9	78x480	Munhall,Pa. U5
9	84x420	Munhall,Pa. U5
9	86x240	SouthChicago,Ill. U5
9	90x240	Cleveland R2
9	90x360	Munhall,Pa. U5
9	90x360	Pittsburgh J5
9 and heavier	60x360	SparrowsPoint,Md. B2
10	20x240	Sharon,Pa. S3
10	25x300	Conshohocken,Pa. A3
10	36x240	Trenton,Mich. M1
10	36x600	Warren,O. R2
10	38x360	Youngstown U5
10	38½ x240	Butler,Pa. A10
10	48x123	Kokomo,Ind. C16
10	48x144	Torrance,Calif. C11
10	48x156	Newport,Ky. N9
10	48x216	Pittsburg,Calif. C11
10	50x120	Torrance,Calif. C11
10	54x192	Steubenville,O. W10
10	60x240	Ashland,Ky. A10
10	60x240	SparrowsPoint,Md. B2
10	60x500	Munhall,Pa. U5
10	66x480	Munhall,Pa. U5
10	72x168	Youngstown Y1
10	72x240	Cleveland J5
10	72x240	Fontana,Calif. K1
10	72x240	IndianaHarbor,Ind. I-2
10	72x420	Munhall,Pa. U5
10	73x264	Dravosburg,Pa. U5
10	73x264	Gary,Ind. U5
10	84x360	Munhall,Pa. U5
10	86x240	SouthChicago,Ill. U5
10	90x240	Cleveland R2
10	90x360	Pittsburgh J5
11	20x240	Sharon,Pa. S3
11	25x300	Conshohocken,Pa. A3
11	36x240	Trenton,Mich. M1
11	36x600	Warren,O. R2
11	38x360	Youngstown U5

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Sheets, Cut lengths

CONTINUED FROM PRECEDING PAGE

Mfrs. Std. Gage	Max. Width Max. Length (inches)	Mill Point, Producer
11	38½x240	Butler,Pa. A10
11	48x138	Kokomo,Ind. C16
11	48x144	Torrance,Calif. C11
11	48x156	Newport,Ky. N9
11	48x192	Steubenville,O. W10
11	48x216	Pittsburg,Calif. C11
11	50x120	Torrance,Calif. C11
11	54x156	Steubenville,O. W10
11	60x240	Ashland,Ky. A10
11	60x240	SparrowsPoint,Md. B2
11	66x240	Fontana,Calif. K1
11	66x360	Munhall,Pa. U5
11	72x168	Youngstown Y1
11	72x240	Cleveland J5
11	72x240	IndianaHarbor,Ind. I-2
11	73x264	Dravosburg,Pa. U5
11	73x264	Gary,Ind. U5
11	78x300	Munhall,Pa. U5
11	86x240	SouthChicago,Ill. U5
11	90x240	Cleveland R2
11	90x300	Pittsburgh J5
11 and heavier	21½x300	Weirton,W.Va. W6
12	19x300	Weirton,W.Va. W6
12	20x240	Sharon,Pa. S3
12	23x300	Conshohocken,Pa. A3
12	36x240	Trenton,Mich. M1
12	36x600	Warren,O. R2
12	38x240	Youngstown U5
12	38½x240	Butler,Pa. A10
12	48x144	Kokomo,Ind. C16
12	48x156	Newport,Ky. N9
12	48x156	Torrance,Calif. C11
12	48x192	Steubenville,O. W10
12	48x216	Pittsburg,Calif. C11
12	50x120	Torrance,Calif. C11
12	54x156	Steubenville,O. W10
12	54x360	Munhall,Pa. U5
12	60x240	Ashland,Ky. A10
12	60x240	Fontana,Calif. K1
12	60x240	SparrowsPoint,Md. B2
12	72x168	Youngstown Y1
12	72x240	Cleveland J5
12	72x240	IndianaHarbor,Ind. I-2
12	72x240	Munhall,Pa. U5
12	73x264	Dravosburg,Pa. U5
12	73x264	Gary,Ind. U5
12	87x156	Cleveland R2
12	90x240	Pittsburgh J5
12 and heavier	72x264	Lackawanna,N.Y. B2
13	18x300	Weirton,W.Va. W6
13	20x240	Sharon,Pa. S3
13	20x300	Conshohocken,Pa. A3
13	34x240	Trenton,Mich. M1
13	36x600	Warren,O. R2
13	38x240	Youngstown U5
13	38½x240	Butler,Pa. A10
13	48x156	Newport,Ky. N9
13	48x156	Torrance,Calif. C11
13	48x192	Steubenville,O. W10
13	48x216	Pittsburg,Calif. C11
13	48x240	Fontana,Calif. K1
13	50x120	Torrance,Calif. C11
13	50x192	SparrowsPoint,Md. B2
13	over 50 to 60x144	SparrowsPoint,Md. B2
13	51x156	Steubenville,O. W10
13	54x200	Ashland,Ky. A10
13	60x264	Lackawanna,N.Y. B2
13	66x240	Cleveland J5
13	72x168	Youngstown Y1
13	72x240	IndianaHarbor,Ind. I-2
13	73x203	Dravosburg,Pa. U5
13	73x264	Gary,Ind. U5
13	76x144	Cleveland R2
13	84x216	Pittsburgh J5
13 and heavier	17½x120	Detroit M1
13 and heavier	80x200	Ecorse,Mich. G5
14	17x300	Weirton,W.Va. W6
14	18x300	Conshohocken,Pa. A3
14	20x240	Sharon,Pa. S3
14	31x240	Trenton,Mich. M1
14	36x240	Fontana,Calif. K1
14	36x600	Warren,O. R2
14	38x240	Youngstown U5
14	38½x240	Butler,Pa. A10
14	48x144	Kokomo,Ind. C16
14	48x156	Newport,Ky. N9
14	48x156	Torrance,Calif. C11
14	48x192	SparrowsPoint,Md. B2
14	48x192	Steubenville,O. W10
14	48x216	Pittsburg,Calif. C11
14 over 48 to	54x144	SparrowsPoint,Md. B2
14	50x120	Torrance,Calif. C11
14	50x156	Steubenville,O. W10
14	54x200	Ashland,Ky. A10
14	60x144	Lackawanna,N.Y. B2
14	60x156	Cleveland J5
14	64x200	Ecorse,Mich. G5
14	66x168	Youngstown Y1
14	66x192	IndianaHarbor,Ind. I-2
14	67x192	Gary,Ind. U5
14	67x203	Dravosburg,Pa. U5
14	70x144	Cleveland R2
14	76x168	Pittsburgh J5
14 and heavier	15x120	Detroit M1
15	13½x300	Weirton,W.Va. W6
15	20x240	Sharon,Pa. S3
15	36x600	Warren,O. R2
15	38x240	Youngstown U5
15	38½x240	Butler,Pa. A10
15	43x188	SparrowsPoint,Md. B2
15 over 43 to	48x144	SparrowsPoint,Md. B2
15	48x144	Lackawanna,N.Y. B2
15	48x156	Newport,Ky. N9
15	48x156	Torrance,Calif. C11
15	48x192	Steubenville,O. W10
15	48x216	Pittsburg,Calif. C11
15	50x96	Torrance,Calif. C11
15	54x200	Ashland,Ky. A10
15	60x168	Youngstown Y1
15	60x192	IndianaHarbor,Ind. I-2
15	60x200	Ecorse,Mich. G5
15	61x144	Cleveland R2
15	61x180	Gary,Ind. U5
15	61x203	Dravosburg,Pa. U5
15	66x168	Pittsburgh J5
16	20x240	Sharon,Pa. S3
16	36x240	Butler,Pa. A10
16	36x600	Warren,O. R2
16	38x240	Youngstown U5
16	43x188	SparrowsPoint,Md. B2
16 over 43 to	48x144	SparrowsPoint,Md. B2
16	48x144	Kokomo,Ind. C16
16	48x144	Lackawanna,N.Y. B2
16	48x156	Cleveland J5
16	48x156	Newport,Ky. N9
16	48x156	Torrance,Calif. C11
16	48x192	Steubenville,O. W10
16	48x200	Ecorse,Mich. G5
16	48x216	Pittsburg,Calif. C11
16	50x96	Torrance,Calif. C11
16	54x200	Ashland,Ky. A10
16	58x144	Cleveland R2
16	60x168	Pittsburgh J5
16	60x168	Youngstown Y1
16	60x192	IndianaHarbor,Ind. I-2
16	61x180	Gary,Ind. U5
16	61x203	Dravosburg,Pa. U5
16 and heavier	13x120	Detroit M1
17	30x600	Warren,O. R2
17	32x240	Butler,Pa. A10
17	36x156	IndianaHarbor,Ind. I-2
17	38x240	Youngstown U5
17	42x144	SparrowsPoint,Md. B2
17	46x144	Cleveland R2
17	48x144	Newport,Ky. N9
17	48x156	Torrance,Calif. C11
17	48x168	Youngstown Y1
17	49x144	Gary,Ind. U5
17	49x203	Dravosburg,Pa. U5
17	50x96	Torrance,Calif. C11
17	56x160	Pittsburgh J5
18	30x600	Warren,O. R2
18	32x240	Butler,Pa. A10
18	36x150	Torrance,Calif. C11
18	36x156	IndianaHarbor,Ind. I-2
18	38x240	Youngstown U5
18	42x144	Newport,Ky. N9
18	42x144	SparrowsPoint,Md. B2
18	46x144	Cleveland R2
18	48x120	Newport,Ky. N9
18	48x144	Kokomo,Ind. C16
18	48x144	Torrance,Calif. C11
18	48x156	Pittsburgh J5
18	48x168	Youngstown Y1
18	49x144	Gary,Ind. U5
18	49x203	Dravosburg,Pa. U5
19	42x144	Newport,Ky. N9
19	48x120	Newport,Ky. N9
20	42x144	Newport,Ky. N9
20	48x120	Newport,Ky. N9
20	48x144	Kokomo,Ind. C16
21	42x144	Newport,Ky. N9
21	48x120	Newport,Ky. N9
22	42x144	Newport,Ky. N9
22	48x120	Newport,Ky. N9
22	48x144	Kokomo,Ind. C16
23	42x144	Newport,Ky. N9
23	48x120	Newport,Ky. N9
24	36x144	Kokomo,Ind. C16
24	36x144	Newport,Ky. N9
24 over 36 to	48x120	Kokomo,Ind. C16
24	48x120	Newport,Ky. N9
25	36x144	Newport,Ky. N9
25	42x120	Newport,Ky. N9
26	36x144	Kokomo,Ind. C16
26	36x144	Newport,Ky. N9
26 over 36 to	42x120	Kokomo,Ind. C16
26	42x120	Newport,Ky. N9
27	36x144	Newport,Ky. N9
27	42x120	Newport,Ky. N9
28	36x144	Kokomo,Ind. C16
28	36x144	Newport,Ky. N9
28 over 36 to	38x120	Kokomo,Ind. C16
28	42x120	Newport,Ky. N9
29	36x144	Newport,Ky. N9
29	40x120	Newport,Ky. N9
30	36x144	Newport,Ky. N9
30	40x120	Newport,Ky. N9

Hot-Rolled Annealed Sheets

4	48x96	Newport,Ky. N9
5	48x108	Newport,Ky. N9
6	48x120	Newport,Ky. N9
7	48x144	Newport,Ky. N9
8	48x144	Newport,Ky. N9
9	48x144	Newport,Ky. N9
10	48x156	Newport,Ky. N9
11	48x156	Newport,Ky. N9
12	48x156	Newport,Ky. N9
13	48x156	Newport,Ky. N9
14	48x156	Newport,Ky. N9
15	48x156	Newport,Ky. N9
16	36x144	Dover,O. R1
16	48x120	Mansfield,O. E6
16	48x156	Newport,Ky. N9
17	36x144	Dover,O. R1
17	48x120	Mansfield,O. E6
17	48x144	Newport,Ky. N9
18	36x144	Dover,O. R1
18	48x120	Mansfield,O. E6
18	48x120	Newport,Ky. N9
19	36x144	Dover,O. R1
19	36x150	Torrance,Calif. C11
19	48x120	Mansfield,O. E6
19	48x120	Newport,Ky. N9
19	48x144	Niles,O. N12
19	48x144	Torrance,Calif. C11
20	30x150	Torrance,Calif. C11
20	36x144	Dover,O. R1
20	48x120	Mansfield,O. E6
20	48x120	Newport,Ky. N9
20	48x144	Niles,O. N12
20	48x144	Torrance,Calif. C11
21	30x150	Torrance,Calif. C11
21	36x144	Dover,O. R1
21	44x120	Mansfield,O. E6
21	48x120	Newport,Ky. N9
21	48x144	Niles,O. N12
21	48x144	Torrance,Calif. C11
22	30x150	Torrance,Calif. C11
22	36x144	Dover,O. R1
22	36x144	Torrance,Calif. C11
22	44x120	Mansfield,O. E6
22	48x120	Newport,Ky. N9
22	48x120	Torrance,Calif. C11
22	48x144	Niles,O. N12
23	30x150	Torrance,Calif. C11
23	36x144	Dover,O. R1
23	36x144	Torrance,Calif. C11
23	44x120	Mansfield,O. E6
23	48x120	Newport,Ky. N9
23	48x120	Torrance,Calif. C11
23	48x144	Niles,O. N12
24	30x150	Torrance,Calif. C11
24	36x144	Dover,O. R1
24	36x144	Torrance,Calif. C11
24	42x120	Mansfield,O. E6
24	48x120	Newport,Ky. N9
24	48x120	Torrance,Calif. C11
24	48x144	Niles,O. N12
25	36x144	Dover,O. R1
25	36x144	Niles,O. N12
25	36x144	Torrance,Calif. C11
25	42x120	Mansfield,O. E6
25	42x120	Newport,Ky. N9
26	36x144	Dover,O. R1
26	36x144	Niles,O. N12
26	36x144	Torrance,Calif. C11
26	38x120	Mansfield,O. E6
26	42x120	Newport,Ky. N9
27	30x144	Torrance,Calif. C11
27	36x120	Torrance,Calif. C11
27	36x144	Dover,O. R1
27	36x144	Niles,O. N12
27	42x120	Newport,Ky. N9
28	30x144	Torrance,Calif. C11
28	36x120	Torrance,Calif. C11
28	36x144	Dover,O. R1
28	36x144	Niles,O. N12
28	42x120	Newport,Ky. N9
29	36x144	Dover,O. R1
29	40x120	Newport,Ky. N9
30	36x144	Dover,O. R1
30	40x120	Newport,Ky. N9

FLAT-ROLLED CARBON STEEL

(Code number following mill point indicates producing company, key on page 38)

Cold-Rolled Sheets, Coil stock

Mfrs. Std. Gage	Max. Width (in.)	Mill Point, Producer
7	24	Cleveland J5
10	90	Cleveland R2
11	24	Cleveland J5
11	38½	Butler,Pa. A10
11	48	Pittsburgh J5
11	72	Lackawanna,N.Y. B2
11	90	Cleveland R2
11 and hvr.	42	Weirton,W.Va. W6
12	36	Warren,O. R2
12	38½	Butler,Pa. A10
12	46	Weirton,W.Va. W6
12	48	Cleveland J5
12	54	Pittsburgh J5
12	72	Lackawanna,N.Y. B2
12	72	Middletown,O. A10
12	90	Cleveland R2
13	36	Warren,O. R2
13	38½	Butler,Pa. A10
13	46	Weirton,W.Va. W6
13	48	Cleveland J5
13	60	Pittsburgh J5
13	62	IndianaHarbor,Ind. I-2
13	70	Youngstown Y1
13	72	Lackawanna,N.Y. B2
13	72	Middletown,O. A10
13	90	Cleveland R2
14	36	Warren,O. R2
14	38½	Butler,Pa. A10
14	46	Weirton,W.Va. W6
14	48	Cleveland J5
14	48	SparrowsPoint,Md. B2
14	52	Steubenville,O. W10
14	70	Pittsburgh J5
14	70	Youngstown Y1
14	72	Dravosburg,Pa. U5
14	72	Ecorse,Mich. G5
14	72	IndianaHarbor,Ind. I-2
14	72	Lackawanna,N.Y. B2
14	72	Middletown,O. A10
14	90	Cleveland R2
15	16	Fontana,Calif. K1
15	36	Warren,O. R2
15	38½	Butler,Pa. A10
15	46	Weirton,W.Va. W6
15	48	Cleveland J5
15	48	SparrowsPoint,Md. B2
15	52	Steubenville,O. W10
15	70	Youngstown Y1
15	72	Dravosburg,Pa. U5
15	72	Ecorse,Mich. G5
15	72	IndianaHarbor,Ind. I-2
15	72	Lackawanna,N.Y. B2
15	72	Middletown,O. A10
15	80	Pittsburgh J5
15	90	Cleveland R2
16	16	Fontana,Calif. K1
16	36	Follansbee,W.Va. F4
16	36	Warren,O. R2
16	38½	Butler,Pa. A10
16	45½	GraniteCity,Ill. G4
16	46	Weirton,W.Va. W6
16	48	Cleveland J5
16	48	Pittsburg,Calif. C11
16	48	SparrowsPoint,Md. B2
16	52	Steubenville,O. W10
16	70	Youngstown Y1
16	72	Dravosburg,Pa. U5
16	72	Gary,Ind. U5
16	72	IndianaHarbor,Ind. I-2
16	72	Lackawanna,N.Y. B2
16	72	Middletown,O. A10
16	90	Cleveland R2
16	90	Ecorse,Mich. G5
16	90	Pittsburgh J5
17	16	Fontana,Calif. K1
17	36	Follansbee,W.Va. F4
17	36	Warren,O. R2
17	38½	Butler,Pa. A10
17	45½	GraniteCity,Ill. G4
17	46	Weirton,W.Va. W6
17	48	Pittsburg,Calif. C11
17	48	SparrowsPoint,Md. B2
17	52	Steubenville,O. W10
17	70	Youngstown Y1
17	72	Dravosburg,Pa. U5
17	72	Gary,Ind. U5
17	72	IndianaHarbor,Ind. I-2
17	72	Lackawanna,N.Y. B2
17	72	Middletown,O. A10
17	90	Cleveland R2
17	90	Ecorse,Mich. G5
17	90	Pittsburgh J5
18	16	Fontana,Calif. K1
18	36	Follansbee,W.Va. F4
18	36	Warren,O. R2
18	38½	Butler,Pa. A10
18	46	Weirton,W.Va. W6
18	48	Cleveland J5
18	48	GraniteCity,Ill. G4
18	48	Pittsburg,Calif. C11
18	48	SparrowsPoint,Md. B2
18	52	Steubenville,O. W10
18	70	Youngstown Y1
18	72	Dravosburg,Pa. U5
18	72	Gary,Ind. U5
18	72	IndianaHarbor,Ind. I-2
18	72	Lackawanna,N.Y. B2
18	72	Middletown,O. A10
18	90	Cleveland R2
18	90	Ecorse,Mich. G5
18	90	Pittsburgh J5
19	16	Fontana,Calif. K1
19	36	Follansbee,W.Va. F4
19	36	Warren,O. R2
19	38½	Butler,Pa. A10
19	46	Weirton,W.Va. W6
19	48	GraniteCity,Ill. G4
19	48	Pittsburg,Calif. C11
19	48	SparrowsPoint,Md. B2
19	52	Steubenville,O. W10
19	70	Youngstown Y1
19	72	Dravosburg,Pa. U5
19	72	Gary,Ind. U5
19	72	IndianaHarbor,Ind. I-2
19	72	Lackawanna,N.Y. B2
19	72	Middletown,O. A10
19	90	Cleveland R2
19	90	Ecorse,Mich. G5
19	90	Pittsburgh J5
20	16	Fontana,Calif. K1
20	24	Chicago Y1
20	36	Follansbee,W.Va. F4
20	36	Warren,O. R2
20	38½	Butler,Pa. A10
20	46	Weirton,W.Va. W6
20	48	Cleveland J5
20	48	GraniteCity,Ill. G4
20	48	Pittsburg,Calif. C11
20	48	SparrowsPoint,Md. B2
20	52	Steubenville,O. W10
20	70	Youngstown Y1
20	72	Dravosburg,Pa. U5
20	72	Gary,Ind. U5
20	72	IndianaHarbor,Ind. I-2
20	72	Lackawanna,N.Y. B2
20	72	Middletown,O. A10
20	90	Cleveland R2
20	90	Ecorse,Mich. G5
20	90	Pittsburgh J5
21	16	Fontana,Calif. K1
21	26	Chicago Y1
21	36	Follansbee,W.Va. F4
21	36	Warren,O. R2
21	38½	Butler,Pa. A10
21	46	Weirton,W.Va. W6
21	48	GraniteCity,Ill. G4
21	48	Middletown,O. A10
21	48	Pittsburg,Calif. C11
21	48	SparrowsPoint,Md. B2
21	48	Steubenville,O. W10
21	60	Lackawanna,N.Y. B2
21	66	Ecorse,Mich. G5
21	66	Youngstown Y1
21	68	Dravosburg,Pa. U5
21	68	Gary,Ind. U5
21	72	IndianaHarbor,Ind. I-2
21	74	Pittsburgh J5
21	90	Cleveland R2
22	16	Fontana,Calif. K1
22	26	Chicago Y1
22	36	Follansbee,W.Va. F4
22	36	Warren,O. R2
22	38½	Butler,Pa. A10
22	46	Weirton,W.Va. W6
22	48	Cleveland J5
22	48	GraniteCity,Ill. G4
22	48	Middletown,O. A10
22	48	Pittsburg,Calif. C11
22	48	SparrowsPoint,Md. B2
22	48	Steubenville,O. W10
22	60	Dravosburg,Pa. U5
22	60	Ecorse,Mich. G5
22	60	Gary,Ind. U5
22	60	Lackawanna,N.Y. B2
22	60	Youngstown Y1
22	72	IndianaHarbor,Ind. I-2
22	74	Pittsburgh J5
22	90	Cleveland R2
23	16	Fontana,Calif. K1
23	27	Chicago Y1
23	36	Follansbee,W.Va. F4
23	36	Warren,O. R2
23	38½	Butler,Pa. A10
23	42	Weirton,W.Va. W6
23	48	Dravosburg,Pa. U5
23	48	GraniteCity,Ill. G4
23	48	Lackawanna,N.Y. B2
23	48	Middletown,O. A10
23	48	Pittsburg,Calif. C11
23	48	Pittsburgh J5
23	48	SparrowsPoint,Md. B2
23	48	Steubenville,O. W10
23	48	Youngstown Y1
23	54	Gary,Ind. U5
23	60	Cleveland R2
23	72	IndianaHarbor,Ind. I-2
24	16	Fontana,Calif. K1
24	30	Chicago Y1
24	33½	Weirton,W.Va. W6
24	56	Follansbee,W.Va. F4
24	36	Warren,O. R2
24	38½	Butler,Pa. A10
24	45	Youngstown Y1
24	48	Cleveland J5
24	48	Dravosburg,Pa. U5
24	48	GraniteCity,Ill. G4
24	48	Gary,Ind. U5
24	48	Lackawanna,N.Y. B2
24	48	Middletown,O. A10
24	48	Pittsburg,Calif. C11
24	48	Pittsburgh J5
24	48	SparrowsPoint,Md. B2
24	48	Steubenville,O. W10
24	60	Cleveland R2
24	72	IndianaHarbor,Ind. I-2
25	16	Fontana,Calif. K1
25	31	Chicago Y1
25	33½	Weirton,W.Va. W6
25	36	Dravosburg,Pa. U5
25	36	Follansbee,W.Va. F4
25	36	Lackawanna,N.Y. B2
25	36	Pittsburg,Calif. C11
25	36	Warren,O. R2
25	38	Steubenville,O. W10
25	38½	Butler,Pa. A10
25	40	Youngstown Y1
25	42	Gary,Ind. U5
25	42	GraniteCity,Ill. G4
25	42	SparrowsPoint,Md. B2
25	48	Cleveland R2
25	48	Middletown,O. A10
25	52	IndianaHarbor,Ind. I-2
26	16	Fontana,Calif. K1
26	32	Chicago Y1
26	33½	Weirton,W.Va. W6
26	36	Dravosburg,Pa. U5
26	36	Follansbee,W.Va. F4
26	36	Lackawanna,N.Y. B2
26	36	Pittsburg,Calif. C11
26	36	Warren,O. R2
26	38	Cleveland J5
26	38	Middletown,O. A10
26	38	Steubenville,O. W10
26	38	Youngstown Y1
26	38½	Butler,Pa. A10
26	42	Gary,Ind. U5
26	42	GraniteCity,Ill. G4
26	42	SparrowsPoint,Md. B2
26	48	Cleveland R2
26	52	IndianaHarbor,Ind. I-2
27	16	Fontana,Calif. K1
27	33	Chicago Y1
27	33½	Weirton,W.Va. W6
27	36	Dravosburg,Pa. U5
27	36	Follansbee,W.Va. F4
27	36	Lackawanna,N.Y. B2
27	36	Pittsburg,Calif. C11
27	36	SparrowsPoint,Md. B2
27	36	Steubenville,O. W10
27	36	Warren,O. R2
27	36	Youngstown Y1
27	38	Gary,Ind. U5
27	38	GraniteCity,Ill. G4
27	38	Middletown,O. A10
27	38½	Butler,Pa. A10
27	48	Cleveland R2
27	52	IndianaHarbor,Ind. I-2
28	16	Fontana,Calif. K1
28	33½	Weirton,W.Va. W6
28	34	Chicago Y1
28	34	Youngstown Y1
28	36	Dravosburg,Pa. U5
28	36	Follansbee,W.Va. F4
28	36	Lackawanna,N.Y. B2
28	36	Pittsburg,Calif. C11
28	36	SparrowsPoint,Md. B2
28	36	Steubenville,O. W10
28	36	Warren,O. R2
28	38	Gary,Ind. U5
28	38	GraniteCity,Ill. G4
28	38	Middletown,O. A10
28	38½	Butler,Pa. A10
28	45	Cleveland R2
28	52	IndianaHarbor,Ind. I-2
29	33½	Weirton,W.Va. W6
29	36	Dravosburg,Pa. U5
29	36	Follansbee,W.Va. F4
29	36	Gary,Ind. U5
29	36	Lackawanna,N.Y. B2
29	36	Middletown,O. A10
29	36	Pittsburg,Calif. C11
29	36	SparrowsPoint,Md. B2
29	36	Warren,O. R2
29	38	IndianaHarbor,Ind. I-2
29	45	Cleveland R2
30	33½	Weirton,W.Va. W6
30	36	Dravosburg,Pa. U5
30	36	Follansbee,W.Va. F4
30	36	Gary,Ind. U5
30	36	Lackawanna,N.Y. B2
30	36	Middletown,O. A10
30	36	Pittsburg,Calif. C11
30	36	SparrowsPoint,Md. B2
30	36	Warren,O. R2
30	38	IndianaHarbor,Ind. I-2
30	45	Cleveland R2
31 32	36	Warren,O. R2
31 34	36	Cleveland R2
31 34	36	Follansbee,W.Va. F4

Cold-Rolled Sheets, Cut lengths

Mfrs. Std. Gage	Max.Width Max.Length (inches)	Mill Point, Producer
7	20x145	Dravosburg,Pa. U5
7	24x120	Cleveland J5
7	60x120	Gary,Ind. U5
7	60x144	Dravosburg,Pa. U5
8	20x145	Dravosburg,Pa. U5
8	24x120	Cleveland J5
8	60x120	Gary,Ind. U5
8	60x144	Dravosburg,Pa. U5
9	20x145	Dravosburg,Pa. U5
9	24x120	Cleveland J5
9	60x120	Gary,Ind. U5
9	60x144	Dravosburg,Pa. U5
10	20x145	Dravosburg,Pa. U5
10	24x120	Cleveland J5
10	60x120	Gary,Ind. U5
10	60x144	Dravosburg,Pa. U5
11	20x145	Dravosburg,Pa. U5
11	24x120	Cleveland J5
11	38½x150	Butler,Pa. A10
11	48x240	Pittsburgh J5
11	52x152	Steubenville,O. W10
11	60x144	Dravosburg,Pa. U5
11	60x144	Gary,Ind. U5
11	72x220	Lackawanna,N.Y. B2
11	90x240	Cleveland R2
11 and hvr.	42x156	Weirtn,W.Va. W6
12	20x145	Dravosburg,Pa. U5
12	36x168	Warren,O. R2
12	38½x150	Butler,Pa. A10
12	42x156	Weirton,W.Va. W6
12	52x152	Steubenville,O. W10
12	54x240	Pittsburgh J5
12	60x144	Gary,Ind. U5
12	72x156	Cleveland J5
12	72x168	Middletown,O. A10
12	72x172	Dravosburg,Pa. U5
12	72x220	Lackawanna,N.Y. B2
12	90x240	Cleveland R2
13	20x145	Dravosburg,Pa. U5
13	under 24x144	Youngstown Y1
13	36x168	Warren,O. R2
13	38½x150	Butler,Pa. A10
13	46x156	Weirton,W.Va. W6
13	52x152	Steubenville,O. W10
13	60x160	Gary,Ind. U5
13	60x240	Pittsburgh J5
13	62x230	Ind.Harbor,Ind. I-2
13	6?x144	Gary,Ind. U5
13	72x132	Gary,Ind. U5
13	72x156	Cleveland J5
13	72x156	Youngstown Y1
13	72x168	Middletown,O. A10
13	72x172	Dravosburg,Pa. U5
13	72x220	Lackawanna,N.Y. B2
13	90x240	Cleveland R2
14	20x145	Dravosburg,Pa. U5
14	under 24x144	Youngstown Y1
14	36x168	Warren,O. R2
14	38½x150	Butler,Pa. A10
14	46x156	Weirton,W.Va. W6
14	48x160	SparrowsPt.,Md. B2
14	52x152	Steubenville,O. W10
14	60x160	Gary,Ind. U5
14	6?x144	Gary,Ind. U5
14	70x240	Pittsburgh J5
14	72x132	Gary,Ind. U5
14	72x156	Cleveland J5
14	72x168	Middletown,O. A10

(Code number following mill point indicates producing company, key on page 38)

Cold-Rolled Sheets, Cut lengths

CONTINUED FROM PRECEDING P

Mfrs. Std. Gage	Max. Width Max. Length (inches)	Mill Point, Producer
14	72x168	Youngstown Y1
14	72x172	Dravosburg,Pa. U5
14	72x220	Lackawanna,N.Y. B2
14	72x230	IndianaHarbor,Ind. I-2
14	72x244	Ecorse,Mich. G5
14	90x240	Cleveland R2
15	20x145	Dravosburg,Pa. U5
15	under 24x144	Youngstown Y1
15	36x168	Warren,O. R2
15	38½x150	Butler,Pa. A10
15	46x156	Weirton,W.Va. W6
15	48x168	SparrowsPoint,Md. B2
15	52x152	Steubenville,O. W10
15	60x160	Gary,Ind. U5
15	68x144	Gary,Ind. U5
15	72x132	Gary,Ind. U5
15	72x156	Cleveland J5
15	72x168	Middletown,O. A10
15	72x172	Dravosburg,Pa. U5
15	72x186	Youngstown Y1
15	72x220	Lackawanna,N.Y. B2
15	72x230	IndianaHarbor,Ind. I-2
15	72x244	Ecorse,Mich. G5
15	80x240	Pittsburgh J5
15	90x240	Cleveland R2
16	20x145	Dravosburg,Pa. U5
16	under 24x144	Youngstown Y1
16	36x144	Follansbee,W.Va. F4
16	36x168	Warren,O. R2
16	38½x150	Butler,Pa. A10
16	45½x156	GraniteCity,Ill. G4
16	46x156	Weirton,W.Va. W6
16	48x160	SparrowsPoint,Md. B2
16	48x168	Pittsburg,Calif. C11
16	52x152	Steubenville,O. W10
16	72x156	Cleveland J5
16	72x168	Middletown,O. A10
16	72x172	Dravosburg,Pa. U5
16	72x172	Gary,Ind. U5
16	72x186	Youngstown Y1
16	72x220	Lackawanna,N.Y. B2
16	72x230	IndianaHarbor,Ind. I-2
16	90x240	Cleveland R2
16	90x240	Pittsburgh J5
16	90x244	Ecorse,Mich. G5
17	20x145	Dravosburg,Pa. U5
17	under 24x144	Youngstown Y1
17	36x144	Follansbee,W.Va. F4
17	36x168	Warren,O. R2
17	38½x150	Butler,Pa. A10
17	45½x156	GraniteCity,Ill. G4
17	46x156	Weirton,W.Va. W6
17	48x160	SparrowsPoint,Md. B2
17	48x168	Pittsburg,Calif. C11
17	52x152	Steubenville,O. W10
17	72x168	Middletown,O. A10
17	72x172	Dravosburg,Pa. U5
17	72x172	Gary,Ind. U5
17	72x186	Youngstown Y1
17	72x220	Lackawanna,N.Y. B2
17	72x230	IndianaHarbor,Ind. I-2
17	90x240	Cleveland R2
17	90x240	Pittsburgh J5
17	90x244	Ecorse,Mich. G5
18	20x145	Dravosburg,Pa. U5
18	under 24x144	Youngstown Y1
18	36x144	Follansbee,W.Va. F4
18	36x168	Warren,O. R2
18	38½x150	Butler,Pa. A10
18	46x156	Weirton,W.Va. W6
18	48x156	GraniteCity,Ill. G4
18	48x160	SparrowsPoint,Md. B2
18	48x168	Pittsburg,Calif. C11
18	52x152	Steubenville,O. W10
18	72x156	Cleveland J5
18	72x168	Middletown,O. A10
18	72x172	Dravosburg,Pa. U5
18	72x172	Gary,Ind. U5
18	72x220	Lackawanna,N.Y. B2
18	72x230	IndianaHarbor,Ind. I-2
18	72x240	Youngstown Y1
18	90x240	Cleveland R2
18	90x240	Pittsburgh J5
18	90x244	Ecorse,Mich. G5
19	20x145	Dravosburg,Pa. U5
19	under 24x144	Youngstown Y1
19	36x144	Follansbee,W.Va. F4
19	36x168	Warren,O. R2
19	38½x150	Butler,Pa. A10
19	46x156	Weirton,W.Va. W6
19	48x156	GraniteCity,Ill. G4
19	48x160	SparrowsPoint,Md. B2
19	48x168	Pittsburg,Calif. C11
19	52x152	Steubenville,O. W10
19	72x168	Middletown,O. A10
19	72x172	Dravosburg,Pa. U5
19	72x172	Gary,Ind. U5
19	72x220	Lackawanna,N.Y. B2
19	72x230	IndianaHarbor,Ind. I-2
19	72x240	Youngstown Y1
19	90x240	Cleveland R2
19	90x240	Pittsburgh J5
19	90x244	Ecorse,Mich. G5
20	20x145	Dravosburg,Pa. U5

Mfrs. Std. Gage	Max. Width Max. Length (inches)	Mill Point, Producer
20	under 24x144	Youngstown Y1
20	24x72	Chicago Y1
20	36x144	Follansbee,W.Va. F4
20	36x168	Warren,O. R2
20	38½x150	Butler,Pa. A10
20	46x156	Weirton,W.Va. W6
20	48x156	GraniteCity,Ill. G4
20	48x160	SparrowsPoint,Md. B2
20	48x168	Pittsburg,Calif. C11
20	52x152	Steubenville,O. W10
20	72x156	Cleveland J5
20	72x168	Middletown,O. A10
20	72x172	Dravosburg,Pa. U5
20	72x172	Gary,Ind. U5
20	72x220	Lackawanna,N.Y. B2
20	72x230	IndianaHarbor,Ind. I-2
20	72x240	Youngstown Y1
20	90x240	Cleveland R2
20	90x240	Pittsburgh J5
20	90x244	Ecorse,Mich. G5
21	20x145	Dravosburg,Pa. U5
21	under 24x144	Youngstown Y1
21	26x72	Chicago Y1
21	36x144	Follansbee,W.Va. F4
21	36x168	Warren,O. R2
21	38½x150	Butler,Pa. A10
21	46x156	Weirton,W.Va. W6
21	48x144	Steubenville,O. W10
21	48x156	GraniteCity,Ill. G4
21	48x160	SparrowsPoint,Md. B2
21	48x168	Middletown,O. A10
21	48x168	Pittsburg,Calif. C11
21	60x220	Lackawanna,N.Y. B2
21	66x240	Youngstown Y1
21	66x244	Ecorse,Mich. G5
21	68x172	Dravosburg,Pa. U5
21	6?x172	Gary,Ind. U5
21	72x230	IndianaHarbor,Ind. I-2
21	74x240	Pittsburgh J5
21	90x180	Cleveland R2
22	20x145	Dravosburg,Pa. U5
22	under 24x144	Youngstown Y1
22	26x72	Chicago Y1
22	36x144	Follansbee,W.Va. F4
22	36x168	Warren,O. R2
22	38½x150	Butler,Pa. A10
22	46x156	Weirton,W.Va. W6
22	48x144	Gary,Ind. U5
22	48x144	Steubenville,O. W10
22	48x156	GraniteCity,Ill. G4
22	48x160	SparrowsPoint,Md. B2
22	48x168	Middletown,O. A10
22	48x168	Pittsburg,Calif. C11
22	50x186	Youngstown Y1
22	60x132	Gary,Ind. U5
22	60x156	Cleveland J5
22	60x160	Youngstown Y1
22	60x172	Dravosburg,Pa. U5
22	60x220	Lackawanna,N.Y. B2
22	60x244	Ecorse,Mich. G5
22	72x230	IndianaHarbor,Ind. I-2
22	74x240	Pittsburgh J5
22	90x180	Cleveland R2
23	20x145	Dravosburg,Pa. U5
23	under 24x144	Youngstown Y1
23	27x72	Chicago Y1
23	36x144	Dravosburg,Pa. U5
23	36x144	Follansbee,W.Va. F4
23	36x144	Gary,Ind. U5
23	36x168	Warren,O. R2
23	38½x150	Butler,Pa. A10
23	42x132	Dravosburg,Pa. U5
23	42x156	Weirton,W.Va. W6
23	4?x186	Youngstown Y1
23	48x120	Dravosburg,Pa. U5
23	48x132	Gary,Ind. U5
23	48x144	Steubenville,O. W10
23	48x156	GraniteCity,Ill. G4
23	48x156	Lackawanna,N.Y. B2
23	48x160	SparrowsPoint,Md. B2
23	48x168	Middletown,O. A10
23	48x168	Pittsburg,Calif. C11
23	48x240	Pittsburgh J5
23	54x120	Gary,Ind. U5
23	60x140	Youngstown Y1
23	60x180	Cleveland R2
23	72x230	IndianaHarbor,Ind. I-2
24	20x145	Dravosburg,Pa. U5
24	under 24x144	Youngstown Y1
24	30x72	Chicago Y1
24	33½x156	Weirton,W.Va. W6
24	36x144	Dravosburg,Pa. U5
24	36x144	Follansbee,W.Va. F4
24	36x144	Gary,Ind. U5
24	36x168	Warren,O. R2
24	38½x150	Butler,Pa. A10
24	42x132	Dravosburg,Pa. U5
24	44x132	Gary,Ind. U5
24	45x186	Youngstown Y1
24	48x120	Dravosburg,Pa. U5
24	48x120	Gary,Ind. U5
24	48x130	Youngstown Y1
24	48x144	Steubenville,O. W10
24	48x156	GraniteCity,Ill. G4

Mfrs. Std. Gage	Max. Width Max. Length (inches)	Mill Point, Produc
24	48x156	Lackawanna,N.Y.
24	48x160	SparrowsPoint,Md.
24	48x168	Middletown,O.
24	48x168	Pittsburg,Calif.
24	48x240	Pittsburgh
24	56x156	Cleveland
24	60x180	Cleveland
24	72x230	IndianaHarbor,Ind.
25	20x145	Dravosburg,Pa.
25	31x72	Chicago
25	33½x156	Weirton,W.Va.
25	36x144	Dravosburg,Pa.
25	36x144	Follansbee,W.Va. F4
25	36x144	Lackawanna,N.Y. B2
25	36x144	Youngstown Y1
25	36x168	Warren,O. R2
25	38x144	Steubenville,O. W10
25	38½x150	Butler,Pa. A10
25	42x120	Gary,Ind. U5
25	42x144	SparrowsPoint,Md. B2
25	42x156	GraniteCity,Ill. G4
25	48x120	Youngstown Y1
25	48x144	Cleveland R2
25	48x168	Middletown,O. A10
25	52x144	IndianaHarbor,Ind. I-2
26	20x145	Dravosburg,Pa. U5
26	32x72	Chicago Y1
26	33½x156	Weirton,W.Va. W6
26	36x144	Dravosburg,Pa. U5
26	36x144	Follansbee,W.Va. F4
26	36x144	Lackawanna,N.Y. B2
26	36x144	Youngstown Y1
26	36x168	Warren,O. R2
26	38x144	Middletown,O. A10
26	38x144	Steubenville,O. W6
26	38x156	Cleveland J5
26	38½x150	Butler,Pa. A10
26	42x120	Gary,Ind. U5
26	42x120	Youngstown Y1
26	42x144	Pittsburg,Calif. C11
26	42x144	SparrowsPoint,Md. B2
26	42x156	GraniteCity,Ill. G4
26	48x144	Cleveland R2
26	52x144	IndianaHarbor,Ind. I-2
27	20x145	Dravosburg,Pa. U5
27	33x41	Chicago Y1
27	33x132	Dravosburg,Pa. U5
27	33½x156	Weirton,W.Va. W6
27	36x130	Dravosburg,Pa. U5
27	36x144	Follansbee,W.Va. F4
27	36x144	Lackawanna,N.Y. B2
27	36x144	SparrowsPoint,Md. B2
27	36x144	Steubenville,O. W10
27	36x144	Youngstown Y1
27	36x168	Warren,O. R2
27	38x120	Gary,Ind. U5
27	38x144	Middletown,O. A10
27	38x156	GraniteCity,Ill. G4
27	38½x150	Butler,Pa. A10
27	42x110	Youngstown Y1
27	48x96	Cleveland R2
27	52x144	IndianaHarbor,Ind. I-2
28	20x145	Dravosburg,Pa. U5
28	33x132	Dravosburg,Pa. U5
28	33½x156	Weirton,W.Va. W6
28	34x41	Chicago Y1
28	34x144	Youngstown Y1
28	36x96	Youngstown Y1
28	36x130	Dravosburg,Pa. U5
28	36x144	Follansbee,W.Va. F4
28	36x144	Lackawanna,N.Y. B2
28	36x144	Pittsburg,Calif. C11
28	36x144	SparrowsPoint,Md. B2
28	36x144	Steubenville,O. W10
28	36x168	Warren,O. R2
28	38x120	Gary,Ind. U5
28	38x144	Middletown,O. A10
28	38x156	GraniteCity,Ill. G4
28	38½x150	Butler,Pa. A10
28	45x96	Cleveland R2
28	52x144	IndianaHarbor,Ind. I-2
29	33½x156	Weirton,W.Va. W6
29	36x120	Dravosburg,Pa. U5
29	36x120	Gary,Ind. U5
29	36x120	Middletown,O. A10
29	36x144	Lackawanna,N.Y. B2
29	36x144	Pittsburg,Calif. C11
29	36x144	SparrowsPoint,Md. B2
29	36x168	Warren,O. R2
29	38x144	IndianaHarbor,Ind. I-2
30	45x96	Cleveland R2
30	33½x156	Weirton,W.Va. W6
30	36x120	Dravosburg,Pa. U5
30	36x120	Gary,Ind. U5
30	36x120	Middletown,O. A10
30	36x144	Lackawanna,N.Y. B2
30	36x144	Pittsburg,Calif. C11
30	36x144	SparrowsPoint,Md. B2
30	36x168	Warren,O. R2
30	38x144	IndianaHarbor,Ind. I-2
30	45x96	Cleveland R2
31	36x96	Cleveland R2
31	36x168	Warren,O. R2
32	36x168	Warren,O. R2

FLAT-ROLLED CARBON STEEL

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Strip, Coil stock

Thickness (inches)	Widths Min.-Max. (inches)	Mill Point, Producer
.053–.312	½–3	Riverdale,Ill. A1
.053–.2030	½–3⅛	Youngstown U5
.058–.203	½–1¼	Sharon,Pa. S3
.058–.203	⅝–4⅞	Youngstown U5
.058–.203	3½–3⅝	Youngstown U5
.058–.350	3–3¼	Riverdale,Ill. A1
.058–.350	3¼–3⅝	Riverdale,Ill. A1
.058–.350	3⅝–4	Riverdale,Ill. A1
.058–	½–2⅝	Atlanta A11
.065–.012	⅝–5	Alton,Ill. L1
.065–.203	½–3	Sharon,Pa. S3
.065–.203	3⅛–3½	Youngstown U5
.065–.2031	3–6½	WestLeechburg,Pa. A4
.066–.375	4–4½	Riverdale,Ill. A1
.068–.375	4½–5	Riverdale,Ill. A1
.070–.375	5–5½	Riverdale,Ill. A1
.072–	1½–2	Atlanta A11
.072–.203	½–6½	Sharon,Pa. S3
.072–.203	3½–4⅛	Youngstown U5
.072–.2031	3–7	WestLeechburg,Pa. A4
.074–.375	5½–6½	Riverdale,Ill. A1
.0149–.0821	⅝–12	Butler,Pa. A10
.015–.080	2–12	IndianaHarbor,Ind. I2
.047–.203	½–12	Sharon,Pa. S3
.048–.187	2–10	Warren,O. R2
.048–.250	2–6	Warren,O. R2
.048–.375	6½–7½	Riverdale,Ill. A1
.049–	1½–2½	Atlanta A11
.049–.058	⅝–6	Alton,Ill. L1
.049–.203	4⅜–5	Youngstown U5
.049–.2031	3–8	WestLeechburg,Pa. A4

Thickness (inches)	Widths Min.-Max. (inches)	Mill Point, Producer
.050–.187	2–11	Warren,O. R2
.050–.250	1½–12	Bridgeport,Conn. S15
.050–.500	7½–8	Riverdale,Ill. A1
.054–.500	8–9	Riverdale,Ill. A1
.058–	⅝–2½	Atlanta A11
.058–.203	5⅛–6	Youngstown U5
.058–.2031	3–9	WestLeechburg,Pa. A4
.058–.500	9–10	Riverdale,Ill. A1
.0598–.125	1–12	Ecorse,Mich. G5
.0598–.2299	1–12	Conshohocken,Pa. A3
.062–.124	½–12	Detroit M1
.062–.156	3–12	Gary,Ind. U5
.062–.187	2–14	Warren,O. R2
.062–.2031	3–10	WestLeechburg,Pa. A4
.062–.500	10–12	Riverdale,Ill. A1
.0625–	⅝–2⅝	Atlanta A11
.064–.500	12–14	Riverdale,Ill. A1
.065–	⅝–3	Atlanta A11
.065–.072	½–7	Alton,Ill. L1
.065–.187	10–12	WestLeechburg,Pa. A4
.065–.203	½–3½	Youngstown U5
.0650–.2299	6¼–8	Youngstown U5
.068–.500	14–16	Riverdale,Ill. A1
.072–	⅝–3	Atlanta A11
.072–.095	½–8	Alton,Ill. L1
.072–.187	10–17	WestLeechburg,Pa. A4
.072–.2299	8¼–9	Youngstown U5
.074–.077	6–28	Trenton,Mich. M1
.074–.164	7–12	IndianaHarbor,Ind. I-2
.076–.203	⅝–12	Sharon,Pa. S3
.078–.092	6–32	Trenton,Mich. M1
.0–2–.500	16–18	Riverdale,Ill. A1

Thickness (inches)	Widths Min.-Max. (inches)	Mill Point, Producer
.0822–.1868	1½–12	Butler,Pa. A10
.082–	⅝–3	Atlanta A11
.083–.187	10–18	WestLeechburg,Pa. A4
.0831–.2299	9¼–12	Youngstown U5
.093–.160	6–36	Trenton,Mich. M1
.095–	⅝–3	Atlanta A11
.095–.187	10–19	WestLeechburg,Pa. A4
.100–.500	18–20	Riverdale,Ill. A1
.104–.125	5½–12	Fontana,Calif. K1
.109–	½–4	Atlanta A11
.109–.120	½–10	Alton,Ill. L1
.109–.187	10–20	WestLeechburg,Pa. A4
.120–	½–4	Atlanta A11
.124–.500	20–22	Riverdale,Ill. A1
.125–	½–4	Atlanta A11
.125–	1–23½	Milton,Pa. B6
.125–.156	⅝–17	Detroit M1
.125–.1875	⅝–2	Houston S8
.125–.1875	½–4	KansasCity,Mo. S8
.125–.203	2–12	Fontana,Calif. K1
.125–.2299	4–12	Ecorse,Mich. G5
.134–	½–4	Atlanta A11
.134 and heavier	½–12	Alton,Ill. L1
.148–	½–4	Atlanta A11
.1562⅝	½–4	Atlanta A11
.165–	½–4	Atlanta A11
.180–	½–4	Atlanta A11
.1875–	½–4	Atlanta A11
.1875–	⅝–2⅞	Milton,Pa. B6
.193–.203	⅝–2½	Youngstown U5
.203–.2299	6¾–12	Fontana,Calif. K1

Hot-Rolled Strip, Cut lengths

Thickness (inches)	Widths Min.-Max. (inches)	Max. Length (inches)	Mill Point, Producer
.0253–.2030	½–3½	240	Youngstown U5
.028–.203	⅝–4⅜	240	Youngstown U5
.028–.203	3¾–3⅝	240	Youngstown U5
.035–.203	3½–3½	240	Youngstown U5
.042–.203	3½–4⅛	240	Youngstown U5
.0449–.0508	12–12	156	Pittsburgh J5
.045–.087	2–12	240	IndianaHarbor,Ind. I-2
.048–.250	2–6	300	Warren,O. R2
.048–.250	over 6–10	600	Warren,O. R2
.049–.203	4⅜–5	240	Youngstown U5
.050–.250	over 6–11	600	Warren,O. R2
.0509–.0567	12–12	160	Pittsburgh J5
.0568–.0635	12–12	168	Pittsburgh J5
.0568–.1868	3–12	156	Ashland,Ky. A10
.058–.203	5¼–6	240	Youngstown U5
.062–.093	3–12	120	Gary,Ind. U5
.062–.250	over 6–13	600	Warren,O. R2
.0636–.0709	12–12	168	Pittsburgh J5
.065–.203	½–3¾	240	Youngstown U5
.0650–.2299	6¼–8	240	Youngstown U5
.0710–.0821	12–12	168	Pittsburgh J5
.0720–.2299	8¼–9	240	Youngstown U5
.0822–.0971	12–12	216	Pittsburgh J5
.0831–.2299	9¼–12	240	Youngstown U5
.088–.104	3½–12	240	IndianaHarbor,Ind. I-2

Thickness (inches)	Widths Min.-Max. (inches)	Max. Length (inches)	Mill Point, Producer
.094–.156	3–12	216	Gary,Ind. U5
.0972–.1120	12–12	240	Pittsburgh J5
.105–.2299	⅝–12	240	IndianaHarbor,Ind. I-2
.109–	⅝–2	480	Pittsburg,Calif. C11
.109–	⅝–2⅝	720	Torrance,Calif. C11
.1121–.1270	12–12	300	Pittsburgh J5
.125–	⅝–2	720	Minnequa,Colo. C10
.125–	⅝–3	480	Pittsburg,Calif. C11
.125–	⅝–4	720	Torrance,Calif. C11
.125–.1875	½–1		Johnstown,Pa. B2
.1271–.1419	12–12	360	Pittsburgh J5
.1420–.1569	12–12	360	Pittsburgh J5
.1570–.1718	12–12	480	Pittsburgh J5
.1719–.1868	12–12	480	Pittsburgh J5
.180–	⅝–3	480	Pittsburg,Calif. C11
.1869–.2316	6–12	180	Ashland,Ky. A10
.1869 and heavier	12–12	480	Pittsburgh J5
.1875–	⅝–2¼		LosAngeles B3
.1875–	⅝–2¼		SanFrancisco B3
.1875–	⅝–2⅝		Seattle B3
.1875–	⅝–3¼	480	Pittsburg,Calif. C11
.1875–	⅝–4	720	Minnequa,Colo. C10
.1875–	⅝–4	720	Torrance,Calif. C11
.1875–	5–10	600	Minnequa,Colo. C10
.193–.203	⅝–2¼	240	Youngstown U5

Cold-Rolled Strip, Coil stock

Thickness (inches)	Widths Min.-Max. (inches)	Mill Point, Producer
.001–.003	⅛–18	Youngstown C8
.0015–.004	.501–2	Worcester,Mass. A7
.0015–.062	6½ (max.)	Clifton,N.J. A14
.002–.062	⅛–6½	Union,N.J. H6
.002–.068	.501–3	Trenton,N.J. R5
.002–.093	.125–13	Forestville,Conn. W1
.003–.093	⅛–24	Youngstown C8
.004–.008	.501–7	Worcester,Mass. A7
.004–.100	⅜–22	Warren,O. T5
.004–.1875	½-under 4	Riverdale,Ill. A1
.005–.062	⅛–5	Pawtucket,R.I. R3
.005–.062	¼–10	Mattapan,Mass. T6
.005–.072	¼–36	NewCastle,Pa. E5
.005–.093	¼–2	Mattapan,Mass. T6
.005–.187	½–12	Bridgeport,Conn. S15
.005–.1875	½-under 5	Riverdale,Ill. A1
.005–.250	⅜–12	NewBritain,Conn. S15
.005–.500	¼–10	Pawtucket,R.I. N8
.006–.125	⅛–27	Wallingford,Conn. W2
.006–.1875	½-under 6	Riverdale,Ill. A1
.007–.1875	½-under 7	Riverdale,Ill. A1
.008–.062	⅜–15	Follansbee,W.Va. F4
.008–.080	.501–8	Worcester,Mass. A7
.008–.156	⅜–12	Rome,N.Y. R6
.008–.1875	½-under 8	Riverdale,Ill. A1
.010–.015	.501–18	Cleveland A7
.010–.065	¼–16	FranklinPark,Ill. T6
.010–.093	½–22	Detroit D2
.010–.093	½–22	NewHaven,Conn. D2
.010–.125	⅜–13½	LosAngeles C1

Thickness (inches)	Widths Min.-Max. (inches)	Mill Point, Producer
.010–.125	½–22	Sharon,Pa. S3
.010–.125	over 7–12	Warren,O. R2
.010–.150	over 3½–7	Warren,O. R2
.010–.187	⅝–3½	Warren,O. R2
.0102–.0625	⅜–26	Dover,O. G6
.011–.049	½–23½	Weirton,W.Va. W6
.0113–.1120	1⅛–24	Middletown,O. A10
.012	12 (max.)	Cleveland J5
.012–.1875	⅜–21½	Riverdale,Ill. A1
.0142–.0508	⅛–24	Butler,Pa. A10
.0142–.093	2–24	IndianaHarbor,Ind. I-2
.015–.020	.501–18	NewHaven,Conn. A7
.015–.095	½–12	NewCastle,Pa. B4
.015–.150	.501–23½	ClevelandA7
.0156–.0625	⅜–22	Anderson,Ind. G6
.016–.0625	⅛–12	Fontana,Calif. K1
.0172–.093	1–12	Youngstown Y1
.018	½–14	Worcester,Mass. W19
.020	½–14	Worcester,Mass. W19
.020–.062	⅜–23½	Detroit M1
.020–.075	½–21	Dearborn,Mich. D3
.020–.095	.501–23½	NewHaven,Conn. A7
.022	½–14	Worcester,Mass. W19
.025	½–14	Worcester,Mass. W19
.028	½–14	Worcester,Mass. W19
.032	½–14	Worcester,Mass. W19
.035	½–14	Worcester,Mass. W19
.042	½–14	Worcester,Mass. W19
.050–.099	⅜–23½	Weirton,W.Va. W6
.0509–.0821	¼–24	Butler,Pa. A10
up to .060	up to 6	NewYork W3

Thickness (inches)	Widths Min.-Max. (inches)	Mill Point, Producer
.0703	½–22	Anderson,Ind. G6
.0703	½–26	Dover,O. G6
.075–.083	⅜–21	Dearborn,Mich. D3
.0781	½–22	Anderson,Ind. G6
.0781	½–26	Dover,O. G6
.0822–.1270	1⅛–24	Butler,Pa. A10
.083–.100	⅜–16¾	Dearborn,Mich. D3
.0938	½–22	Anderson,Ind. G6
.0938	½–26	Dover,O. G6
.094–.125	⅜–21	Detroit D2
.094–.125	⅜–21	NewHaven,Conn. D2
.095–.140	⅛–14	NewCastle,Pa. B4
.100–.104	⅜–21½	Weirton,W.Va. W6
.100–.125	1–16⅞	Dearborn,Mich. D3
.105–.109	⅜–20½	Weirton,W.Va. W6
.109	1–22	Anderson,Ind. G6
.109	1–26	Dover,O. G6
.110–.119	⅜–19½	Weirton,W.Va. W6
.120–.125	⅜–18½	Weirton,W.Va. W6
.125	1–22	Anderson,Ind. G6
.125	1–26	Dover,O. G6
.126–.130	⅜–16½	Weirton,W.Va. W6
.126–.187	⅜–17	Detroit D2
.126–.187	⅜–17	NewHaven,Conn. D2
.131–.140	⅜–15½	Weirton,W.Va. W6
.140–.500	1½–18	NewCastle,Pa. B4
.141–.145	⅜–13½	Weirton,W.Va. W6
.146–.150	⅜–11½	Weirton,W.Va. W6
.151–.160	⅜–10½	Weirton,W.Va. W6
.161–.187	2½–7⅞	Weirton,W.Va. W6

(Code number following mill point indicates producing company, key on page 38)

Galvanized Flat Sheets (Hot Dipped)

Galv. Sheet Gage	Max. Width Max. Length (inches)	Mill Point, Producer
8	36x156	IndianaHarbor,Ind. I-2
8	36x156	Newport,Ky. N9
8	48x110	Torrance,Calif. C11
8	48x156	SparrowsPoint,Md. B2
8	60x180	Ashland,Ky. A10
9	36x156	IndianaHarbor,Ind. I-2
9	36x156	Newport,Ky. N9
9	48x120	Torrance,Calif. C11
9	48x156	SparrowsPoint,Md. B2
9	60x180	Ashland,Ky. A10
10	48x120	Canton,O. R2
10	48x120	MartinsFerry,O. W10
10	48x123	Kokomo,Ind. C16
10	48x144	AlabamaCity,Ala. R2
10	48x144	Torrance,Calif. C11
10	48x156	IndianaHarbor,Ind. I-2
10	48x156	Newport,Ky. N9
10	48x156	SparrowsPoint,Md. B2
10	50x192	Gary,Ind. U5
10	52x144	Steubenville,O. W10
10	60x144	Gary,Ind. U5
10	60x180	Ashland,Ky. A10
10 and hvr.	48x137	Weirton,W.Va. W6
11	36x156	Weirton,W.Va. W6
11	48x138	Kokomo,Ind. C16
11	48x144	AlabamaCity,Ala. R2
11	48x144	Torrance,Calif. C11
11	48x156	Dravosburg,Pa. U5
11	48x156	IndianaHarbor,Ind. I-2
11	48x156	Newport,Ky. N9
11	48x156	SparrowsPoint,Md. B2
11	50x192	Gary,Ind. U5
11	60x144	Gary,Ind. U5
11	60x180	Ashland,Ky. A10
12	36x156	Weirton,W.Va. W6
12	48x120	MartinsFerry,O. W10
12	48x144	AlabamaCity,Ala. R2
12	48x144	Kokomo,Ind. C16
12	48x144	Pittsburg,Calif. C11
12	48x150	Torrance,Calif. C11
12	48x156	Canton,O. R2
12	48x156	Dravosburg,Pa. U5
12	48x156	IndianaHarbor,Ind. I-2
12	48x156	Newport,Ky. N9
12	48x156	SparrowsPoint,Md. B2
12	52x144	Steubenville,O. W10
12	60x180	Ashland,Ky. A10
12	60x192	Gary,Ind. U5
13	36x156	Weirton,W.Va. W6
13	48x144	AlabamaCity,Ala. R2
13	48x144	Pittsburg,Calif. C11
13	48x150	Torrance,Calif. C11
13	48x156	Canton,O. R2
13	48x156	Dravosburg,Pa. U5
13	48x156	IndianaHarbor,Ind. I-2
13	48x156	Newport,Ky. N9
13	48x156	SparrowsPoint,Md. B2
13	54x180	Ashland,Ky. A10
13	60x192	Gary,Ind. U5
14	36x156	Weirton,W.Va. W6
14	48x120	MartinsFerry,O. W10
14	48x144	AlabamaCity,Ala. R2
14	48x144	Kokomo,Ind. C16
14	48x144	Niles,O. N12
14	48x144	Pittsburg,Calif. C11
14	48x150	Torrance,Calif. C11
14	48x156	Canton,O. R2
14	48x156	IndianaHarbor,Ind. I-2
14	48x156	Newport,Ky. N9
14	48x156	SparrowsPoint,Md. B2
14	50x144	Steubenville,O. W10
14	54x156	Dravosburg,Pa. U5
14	54x180	Ashland,Ky. A10
14	60x192	Gary,Ind. U5
15	36x156	Weirton,W.Va. W6
15	48x144	AlabamaCity,Ala. R2
15	48x144	Niles,O. N12
15	48x144	Pittsburg,Calif. C11
15	48x150	Torrance,Calif. C11
15	48x156	Canton,O. R2
15	48x156	IndianaHarbor,Ind. I-2
15	48x156	Newport,Ky. N9
15	48x156	SparrowsPoint,Md. B2
15	54x156	Dravosburg,Pa. U5
15	54x180	Ashland,Ky. A10
15	60x180	Gary,Ind. U5
16	36x144	Dover,O. R1
16	36x156	Weirton,W.Va. W6
16	48x120	MartinsFerry,O. W10
16	48x144	AlabamaCity,Ala. R2
16	48x144	Kokomo,Ind. C16
16	48x144	Niles,O. N12
16	48x144	Pittsburg,Calif. C11
16	48x144	Steubenville,O. W10
16	48x150	Torrance,Calif. C11
16	48x156	Canton,O. R2
16	48x156	IndianaHarbor,Ind. I-2
16	48x156	Newport,Ky. N9
16	48x156	SparrowsPoint,Md. B2
16	54x156	Dravosburg,Pa. U5
16	54x180	Ashland,Ky. A10
16	60x180	Gary,Ind. U5
17	36x144	Dover,O. R1
17	36x156	Weirton,W.Va. W6
17	48x144	AlabamaCity,Ala. R2
17	48x144	Newport,Ky. N9
17	48x144	Niles,O. N12
17	48x144	Pittsburg,Calif. C11
17	48x150	Torrance,Calif. C11
17	48x156	Canton,O. R2
17	48x156	Dravosburg,Pa. U5
17	48x156	IndianaHarbor,Ind. I-2
17	48x156	SparrowsPoint,Md. B2
17	60x160	Gary,Ind. U5
18	36x144	Dover,O. R1
18	36x150	Torrance,Calif. C11
18	36x156	Weirton,W.Va. W6
18	48x120	MartinsFerry,O. W10
18	48x120	Newport,Ky. N9
18	48x120	Steubenville,O. W10
18	48x144	AlabamaCity,Ala. R2
18	48x144	Canton,O. R2
18	48x144	Kokomo,Ind. C16
18	48x144	Niles,O. N12
18	48x144	Pittsburg,Calif. C11
18	48x143	Torrance,Calif. C11
18	48x156	Dravosburg,Pa. U5
18	48x156	IndianaHarbor,Ind. I-2
18	48x156	SparrowsPoint,Md. B2
18	60x160	Gary,Ind. U5
19	36x144	Dover,O. R1
19	36x150	Torrance,Calif. C11
19	36x156	Weirton,W.Va. W6
19	48x120	Newport,Ky. N9
19	48x144	AlabamaCity,Ala. R2
19	48x144	Canton,O. R2
19	48x144	Niles,O. N12
19	48x144	Pittsburg,Calif. C11
19	48x144	SparrowsPoint,Md. B2
19	48x144	Torrance,Calif. C11
19	48x156	Dravosburg,Pa. U5
19	48x156	IndianaHarbor,Ind. I-2
19	60x160	Gary,Ind. U5
20	30x150	Torrance,Calif. C11
20	36x144	Dover,O. R1
20	36x156	Weirton,W.Va. W6
20	48x120	MartinsFerry,O. W10
20	48x120	Newport,Ky. N9
20	48x120	Steubenville,O. W10
20	48x144	AlabamaCity,Ala. R2
20	48x144	Canton,O. R2
20	48x144	Dravosburg,Pa. U5
20	48x144	Kokomo,Ind. C16
20	48x144	Niles,O. N12
20	48x144	Pittsburg,Calif. C11
20	48x144	SparrowsPoint,Md. B2
20	48x144	Torrance,Calif. C11
20	48x156	Gary,Ind. U5
20	48x156	IndianaHarbor,Ind. I-2
20	54x132	Gary,Ind. U5
21	30x150	Torrance,Calif. C11
21	36x144	Dover,O. R1
21	36x156	Weirton,W.Va. W6
21	48x120	Newport,Ky. N9
21	48x144	Canton,O. R2
21	48x144	Dravosburg,Pa. U5
21	48x144	Niles,O. N12
21	48x144	Pittsburg,Calif. C11
21	48x144	SparrowsPoint,Md. B2
21	48x144	Torrance,Calif. C11
21	48x156	Gary,Ind. U5
21	48x156	IndianaHarbor,Ind. I-2
21	54x132	Gary,Ind. U5
22	30x150	Torrance,Calif. C11
22	36x144	Dover,O. R1
22	36x144	Torrance,Calif. C11
22	36x156	Weirton,W.Va. W6
22	38x144	AlabamaCity,Ala. R2
22	48x120	AlabamaCity,Ala. R2
22	48x120	MartinsFerry,O. W10
22	48x120	Newport,Ky. N9
22	48x120	Steubenville,O. W10
22	48x120	Torrance,Calif. C11
22	48x144	Canton,O. R2
22	48x144	Dravosburg,Pa. U5
22	48x144	Gary,Ind. U5
22	48x144	Kokomo,Ind. C16
22	48x144	Niles,O. N12
22	48x144	Pittsburg,Calif. C11
22	48x144	SparrowsPoint,Md. B2
22	48x156	IndianaHarbor,Ind. I-2
23	30x150	Torrance,Calif. C11
23	36x144	Dover,O. R1
23	36x144	Torrance,Calif. C11
23	36x156	Weirton,W.Va. W6
23	48x120	Newport,Ky. N9
23	48x120	Torrance,Calif. C11
23	48x144	Canton,O. R2
23	48x144	Dravosburg,Pa. U5
23	48x144	Gary,Ind. U5
23	48x144	IndianaHarbor,Ind. I-2
23	48x144	Niles,O. N12
23	48x144	Pittsburg,Calif. C11
23	48x144	SparrowsPoint,Md. B2
24	30x150	Torrance,Calif. C11
24	36x144	Dover,O. R1
24	36x144	Gary,Ind. U5
24	36x144	Kokomo,Ind. C16

Galv. Sheet Gage	Max. Width Max. Length (inches)	Mill Point, Producer
24	36x144	Torrance,Calif. C11
24	36x156	Weirton,W.Va. W6
24 over 36 to	48x120	Kokomo,Ind. C16
24	38x144	AlabamaCity,Ala. R2
24	44x132	Gary,Ind. U5
24	48x120	AlabamaCity,Ala. R2
24	48x120	Gary,Ind. U5
24	48x120	MartinsFerry,O. W10
24	48x120	Newport,Ky. N9
24	48x120	Steubenville,O. W10
24	48x120	Torrance,Calif. C11
24	48x144	Canton,O. R2
24	48x144	Dravosburg,Pa. U5
24	48x144	IndianaHarbor,Ind. I-2
24	48x144	Niles,O. N12
24	48x144	Pittsburg,Calif. C11
24	48x144	SparrowsPoint,Md. B2
25	36x144	Dover,O. R1
25	36x144	Dravosburg,Pa. U5
25	36x144	Gary,Ind. U5
25	36x144	Torrance,Calif. C11
25	36x156	Weirton,W.Va. W6
25	42x96	Torrance,Calif. C11
25	42x120	Newport,Ky. N9
25	42x144	Pittsburg,Calif. C11
25	44x132	Gary,Ind. U5
25	48x120	Gary,Ind. U5
25	48x144	Canton,O. R2
25	48x144	IndianaHarbor,Ind. I-2
25	48x144	SparrowsPoint,Md. B2
26	36x144	Dover,O. R1
26	36x144	Dravosburg,Pa. U5
26	36x144	Kokomo,Ind. C16
26	36x144	Niles,O. N12
26	36x144	Torrance,Calif. C11
26	36x156	Weirton,W.Va. W6
26 over 36 to	42x120	Kokomo,Ind. C16
26	38x120	MartinsFerry,O. W10
26	38x120	Steubenville,O. W10
26	38x144	AlabamaCity,Ala. R2
26	42x96	Torrance,Calif. C11
26	42x120	Gary,Ind. U5
26	42x120	Newport,Ky. N9
26	42x144	Pittsburg,Calif. C11
26	48x120	Niles,O. N12
26	48x144	Canton,O. R2
26	48x144	IndianaHarbor,Ind. I-2
26	48x144	SparrowsPoint,Md. B2
27	36x144	AlabamaCity,Ala. R2
27	36x144	Dover,O. R1
27	36x144	Dravosburg,Pa. U5
27	36x144	Pittsburg,Calif. C11
27	36x144	SparrowsPoint,Md. B2
27	36x144	Torrance,Calif. C11
27	36x156	Weirton,W.Va. W6
27	42x120	Gary,Ind. U5
27	42x120	Newport,Ky. N9
27	44x144	IndianaHarbor,Ind. I-2
27	48x144	Canton,O. R2
28	30x144	Niles,O. N12
28	36x120	Niles,O. N12
28	36x144	AlabamaCity,Ala. R2
28	36x144	Canton,O. R2
28	36x144	Dover,O. R1
28	36x144	Dravosburg,Pa. U5
28	36x144	Kokomo,Ind. C16
28	36x144	Pittsburg,Calif. C11
28	36x144	SparrowsPoint,Md. B2
28	36x144	Torrance,Calif. C11
28	36x156	Weirton,W.Va. W6
28 over 36 to	38x120	Kokomo,Ind. C16
28	38x120	MartinsFerry,O. W10
28	38x120	Steubenville,O. W10
28	42x120	Gary,Ind. U5
28	42x120	Newport,Ky. N9
28	44x144	IndianaHarbor,Ind. I-2
29	30x144	Niles,O. N12
29	30x144	Torrance,Calif. C11
29	36x120	Niles,O. N12
29	36x120	Torrance,Calif. C11
29	36x144	AlabamaCity,Ala. R2
29	36x144	Canton,O. R2
29	36x144	Dover,O. R1
29	36x144	Dravosburg,Pa. U5
29	36x144	IndianaHarbor,Ind. I-2
29	36x144	MartinsFerry,O. W10
29	36x144	Pittsburg,Calif. C11
29	36x144	SparrowsPoint,Md. B2
29	36x144	Steubenville,O. W10
29	36x156	Weirton,W.Va. W6
29	40x120	Newport,Ky. N9
30	30x144	Niles,O. N12
30	30x144	Torrance,Calif. C11
30	36x120	Dravosburg,Pa. U5
30	36x120	Niles,O. N12
30	36x120	Torrance,Calif. C11
30	36x144	AlabamaCity,Ala. R2
30	36x144	Canton,O. R2
30	36x144	Dover,O. R1
30	36x144	IndianaHarbor,Ind. I-2
30	36x144	Kokomo,Ind. C16
30	36x144	MartinsFerry,O. W10
30	36x144	Pittsburg,Calif. C11
30	36x144	SparrowsPoint,Md. B2
30	36x144	Steubenville,O. W10
30	36x156	Weirton,W.Va. W6

FLAT-ROLLED CARBON STEEL

(Code number following mill point indicates producing company, key on page 38)

Galvanized Sheet, Coils (Hot Dipped)

Galv. Sheet Gage	Max. Width (in.)	Mill Point, Producer
18	48	Gary,Ind. U5
19	48	Gary,Ind. U5
20	36	Dravosburg,Pa. U5
20	48	Gary,Ind. U5
21	36	Dravosburg,Pa. U5
21	48	Gary,Ind. U5
22	36	Dravosburg,Pa. U5
22	48	Gary,Ind. U5
23	36	Dravosburg,Pa. U5
23	48	Gary,Ind. U5
24	36	Dravosburg,Pa. U5
24	48	Gary,Ind. U5
25	36	Dravosburg,Pa. U5
25	48	Gary,Ind. U5
26	36	Dravosburg,Pa. U5
26	42	Gary,Ind. U5
27	36	Dravosburg,Pa. U5
27	42	Gary,Ind. U5
28	36	Dravosburg,Pa. U5
28	42	Gary,Ind. U5

Galvannealed Flat Sheets

Galv. Sheet Gage	Max. Width Max. Length (inches)	Mill Point, Producer
10	48x123	Kokomo,Ind. C16
11	48x138	Kokomo,Ind. C16
12	36x156	Canton,O. R2
12	48x144	Kokomo,Ind. C16
13	36x156	Canton,O. R2
14	42x120	Newport,Ky. N9
14	48x144	Canton,O. R2
14	48x144	Kokomo,Ind. C16
15	48x120	Newport,Ky. N9
15	48x144	Canton,O. R2
16	48x144	Canton,O. R2
16	48x144	Kokomo,Ind. C16
16	48x144	Newport,Ky. N9
17	48x144	Newport,Ky. N9
17	50x144	Canton,O. R2
18	48x120	Newport,Ky. N9
18	48x144	Kokomo,Ind. C16
18	50x144	Canton,O. R2
19	48x120	Newport,Ky. N9
19	50x144	Canton,O. R2
20	48x120	Newport,Ky. N9
20	48x144	Dravosburg,Pa. U5
20	48x144	Kokomo,Ind. C16
20	50x144	Canton,O. R2
21	48x120	Newport,Ky. N9
21	48x144	Canton,O. R2
21	48x144	Dravosburg,Pa. U5
22	48x120	Newport,Ky. N9
22	48x144	Canton,O. R2
22	48x144	Dravosburg,Pa. U5
22	48x144	Kokomo,Ind. C16
23	48x120	Newport,Ky. N9
23	48x144	Canton,O. R2
23	48x144	Dravosburg,Pa. U5
24	36x144	Kokomo,Ind. C16
24	over 36 to 48x120	Kokomo,Ind. C16
24	48x120	Newport,Ky. N9
24	48x144	Canton,O. R2
24	48x144	Dravosburg,Pa. U5
25	36x144	Dravosburg,Pa. U5
25	42x120	Newport,Ky. N9
25	48x144	Canton,O. R2
26	36x144	Dravosburg,Pa. U5
26	36x144	Kokomo,Ind. C16
26	over 36 to 48x120	Kokomo,Ind. C16
26	42x96	Newport,Ky. N9
26	48x144	Canton,O. R2
27	42x96	Newport,Ky. N9
27	48x144	Canton,O. R2
28	36x96	Newport,Ky. N9
28	36x144	Canton,O. R2
28	36x144	Kokomo,Ind. C16
28	over 36 to 48x120	Kokomo,Ind. C16
28	42x120	Canton,O. R2
29	36x144	Canton,O. R2
30	36x120	Canton,O. R2
30	36x144	Kokomo,Ind. C16

Hot-Rolled Plates, Sheared

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
.180	48 1/8x480	Johnstown,Pa. B2
.180	48 1/8x480	SparrowsPt.,Md. B2
.180	54x480	Johnstown,Pa. B2
.180	54x480	SparrowsPt.,Md. B2
.180	60x480	Johnstown,Pa. B2
.180	60x480	SparrowsPt.,Md. B2
.180	66x480	Johnstown,Pa. B2
.180	66x480	SparrowsPt.,Md. B2
.180	72x420	Johnstown,Pa. B2
.180	72x480	SparrowsPt.,Md. B2
.180	78x400	Johnstown,Pa. B2
.180	78x400	SparrowsPt.,Md. B2
.180	84x360	Johnstown,Pa. B2
.180	84x360	SparrowsPt.,Md. B2
.180	90x300	SparrowsPt.,Md. B2
.180	90x360	Johnstown,Pa. B2
.180	96x300	Johnstown,Pa. B2
.180	96x300	SparrowsPt.,Md. B2
.180-.187	60x220	Ashland,Ky. A10
.180-.3125	72x210	Cleveland J5
.180-.375	54x192	Steubenville,O. W10
.180-.625	90x720	Pittsburgh J5
180 and heavier	90x480	Pittsburgh J5
1/4	24x720	Munhall,Pa. U5
1/4	24x720	SouthChicago,Ill. U5
1/4	30x720	Munhall,Pa. U5
1/4	30x720	SouthChicago,Ill. U5
1/4	36x720	SouthChicago,Ill. U5
1/4	36x900	Munhall,Pa. U5
1/4	42x720	SouthChicago,Ill. U5
1/4	42x900	Munhall,Pa. U5
1/4	48x480	Geneva,Utah G1
1/4	48x720	Ind.Harbor,Ind. I-2
1/4	48x720	SouthChicago,Ill. U5
1/4	48x900	Munhall,Pa. U5
1/4	48 1/8x480	Johnstown,Pa. B2
1/4	48 1/8x480	SparrowsPt.,Md. B2
1/4	54x480	Johnstown,Pa. B2
1/4	54x480	SparrowsPt.,Md. B2
1/4	54x600	Ind.Harbor,Ind. I-2
1/4	54x650	Coatesville,Pa. L7
1/4	54x720	SouthChicago,Ill. U5
1/4	54x900	Munhall,Pa. U5
1/4	60x480	Johnstown,Pa. B2
1/4	60x480	SparrowsPt.,Md. B2
1/4	60x600	Ind.Harbor,Ind. I-2
1/4	60x650	Coatesville,Pa. L7
1/4	60x720	SouthChicago,Ill. U5
1/4	60x900	Munhall,Pa. U5
1/4	66x420	Conshohocken,Pa. A3
1/4	66x480	Johnstown,Pa. B2
1/4	66x480	SparrowsPt.,Md. B2
1/4	66x600	Ind.Harbor,Ind. I-2
1/4	66x650	Coatesville,Pa. L7
1/4	66x720	SouthChicago,Ill. U5
1/4	66x900	Munhall,Pa. U5
1/4	72x300	Conshohocken,Pa. A3
1/4	72x300	Youngstown Y1
1/4	72x354	Dravosburg,Pa. U5
1/4	72x360	Fontana,Calif. K1
1/4	72x420	Johnstown,Pa. B2
1/4	72x480	Geneva,Utah G1
1/4	72x600	SparrowsPt.,Md. B2
1/4	72x600	Ind.Harbor,Ind. I-2
1/4	72x650	Coatesville,Pa. L7
1/4	72x720	SouthChicago,Ill. U5
1/4	72x840	Munhall,Pa. U5
1/4	76x420	Ind.Harbor,Ind. I-2
1/4	78x400	Johnstown,Pa. B2
1/4	78x400	SparrowsPt.,Md. B2
1/4	78x420	Geneva,Utah G1
1/4	78x650	Coatesville,Pa. L7
1/4	78x720	Munhall,Pa. U5
1/4	78x720	SouthChicago,Ill. U5
1/4	80x360	Ind.Harbor,Ind. I-2
1/4	84x360	Ind.Harbor,Ind. I-2
1/4	84x360	Johnstown,Pa. B2
1/4	84x360	SparrowsPt.,Md. B2
1/4	84x384	Geneva,Utah G1
1/4	84x600	Munhall,Pa. U5
1/4	84x650	Coatesville,Pa. L7
1/4	84x720	SouthChicago,Ill. U5
1/4	87x540	Munhall,Pa. U5
1/4	88x720	SouthChicago,Ill. U5
1/4	90x300	SparrowsPt.,Md. B2
1/4	90x360	Johnstown,Pa. B2
1/4	90x384	Geneva,Utah G1
1/4	90x480	Munhall,Pa. U5
1/4	90x600	Coatesville,Pa. L7
1/4	96x180	Harrisburg,Pa. C5
1/4	96x300	SparrowsPt.,Md. B2
1/4	96x360	Johnstown,Pa. B2
1/4	96x384	Geneva,Utah G1
1/4	96x430	Munhall,Pa. U5
1/4	96x600	Coatesville,Pa. L7
1/4	102x300	Johnstown,Pa. B2
1/4	102x430	Munhall,Pa. U5
1/4	102x500	Coatesville,Pa. L7
1/4	108x430	Munhall,Pa. U5
1/4	108x500	Coatesville,Pa. L7
1/4	114x410	Munhall,Pa. U5
1/4	114x500	Coatesville,Pa. L7
1/4	120x390	Munhall,Pa. U5
1/4	120x500	Coatesville,Pa. L7
1/4	126x340	Munhall,Pa. U5
1/4	126x500	Coatesville,Pa. L7
1/4	132x300	Munhall,Pa. U5
1/4	132x400	Coatesville,Pa. L7
1/4	138x400	Coatesville,Pa. L7
1/4	144x400	Coatesville,Pa. L7
1/4	150x400	Coatesville,Pa. L7
1/4	156x400	Coatesville,Pa. L7
1/4	162x300	Coatesville,Pa. L7
1/4	168x300	Coatesville,Pa. L7
1/4-1/2	96x480	Houston S5
1/4-6	150x600	Claymont,Del. W16
.188-.250	60x220	Ashland,Ky. A10
.230	24x550	Johnstown,Pa. B2
.230	24x550	SparrowsPt.,Md. B2
.230	30x550	Johnstown,Pa. B2
.230	30x550	SparrowsPt.,Md. B2
.230	36x475	Johnstown,Pa. B2
.230	36x480	SparrowsPt.,Md. B2
.230	42x550	Johnstown,Pa. B2
.230	42x556	SparrowsPt.,Md. B2
.230	48 1/8x550	Johnstown,Pa. B2
.230	48 1/8x550	SparrowsPt.,Md. B2
.230	54x550	Johnstown,Pa. B2
.230	54x600	SparrowsPt.,Md. B2
.230	60x550	Johnstown,Pa. B2
.230	60x600	SparrowsPt.,Md. B2
.230	66x520	Johnstown,Pa. B2
.230	66x600	SparrowsPt.,Md. B2
.230	72x500	Johnstown,Pa. B2
.230	72x720	SparrowsPt.,Md. B2
.230	78x500	Johnstown,Pa. B2
.230	78x660	SparrowsPt.,Md. B2
.230	84x480	Johnstown,Pa. B2
.230	84x630	SparrowsPt.,Md. B2
.230	90x480	Johnstown,Pa. B2
.230	90x600	SparrowsPt.,Md. B2
.230	96x480	Johnstown,Pa. B2
.230	96x560	SparrowsPt.,Md. B2
.230	102x420	Johnstown,Pa. B2
.230	102x550	SparrowsPt.,Md. B2
.230	104x360	Johnstown,Pa. B2
.230	108x360	Johnstown,Pa. B2
.230	108x560	SparrowsPt.,Md. B2
.230	110x330	Johnstown,Pa. B2
.230	114x320	Johnstown,Pa. B2
.230	114x460	SparrowsPt.,Md. B2
.230	120x432	SparrowsPt.,Md. B2
.230	126x400	SparrowsPt.,Md. B2
.230	132x360	SparrowsPt.,Md. B2
.230-.375	30x195	Ecorse,Mich. G5
1/4	24x360	Coatesville,Pa. L7
1/4	24x550	Johnstown,Pa. B2
1/4	24x550	SparrowsPt.,Md. B2
1/4	24x720	Munhall,Pa. U5
1/4	24x720	SouthChicago,Ill. U5
1/4	30x550	Johnstown,Pa. B2
1/4	30x550	SparrowsPt.,Md. B2
1/4	30x720	IndianaHarbor,Ind. I-2
1/4	30x720	Munhall,Pa. U5
1/4	30x720	SouthChicago,Ill. U5
1/4	36x390	Coatesville,Pa. L7
1/4	36x475	Johnstown,Pa. B2
1/4	36x480	SparrowsPt.,Md. B2
1/4	36x600	Geneva,Utah G1
1/4	36x720	IndianaHarbor,Ind. I-2
1/4	36x720	SouthChicago,Ill. U5
1/4	36x900	Munhall,Pa. U5
1/4	42x550	Johnstown,Pa. B2
1/4	42x550	SparrowsPt.,Md. B2
1/4	42x720	IndianaHarbor,Ind. I-2
1/4	42x720	SouthChicago,Ill. U5
1/4	42x900	Munhall,Pa. U5
1/4	48x660	Gary,Ind. U5
1/4	48x700	Coatesville,Pa. L7
1/4	48x720	IndianaHarbor,Ind. I-2
1/4	48x720	SouthChicago,Ill. U5
1/4	48x900	Munhall,Pa. U5
1/4	48 1/8x550	Johnstown,Pa. B2
1/4	48 1/8x550	SparrowsPt.,Md. B2
1/4	54x550	Johnstown,Pa. B2
1/4	54x600	SparrowsPt.,Md. B2
1/4	54x640	Gary,Ind. U5

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Plates, Sheared

CONTINUED FROM PRECEDING PAGE

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
¼	54x700	Coatesville,Pa. L7
¼	54x720	IndianaHarbor,Ind. I-2
¼	54x720	SouthChicago,Ill. U5
¼	54x900	Munhall,Pa. U5
¼	60x300	Economy,Pa. B14
¼	60x360	Johnstown,Pa. B2
¼	60x600	SparrowsPt.,Md. B2
¼	60x620	Gary,Ind. U5
¼	60x700	Coatesvil.e,Pa. L7
¼	60x720	IndianaHarbor,Ind. I-2
¼	60x720	SouthChicago,Ill. U5
¼	60x900	Munhall,Pa. U5
¼	66x520	Johnstown,Pa. B2
¼	66x580	Gary,Ind. U5
¼	66x600	SparrowsPt.,Md. B2
¼	66x700	Coatesville,Pa. L7
¼	66x720	IndianaHarbor,Ind. I-2
¼	66x720	SouthChicago,Ill. U5
¼	66x900	Munhall,Pa. U5
¼	72x300	Youngstown Y1
¼	72x500	Johnstown,Pa. B2
¼	72x560	Gary,Ind. U5
¼	72x700	Coatesville,Pa. L7
¼	72x720	IndianaHarbor,Ind. I-2
¼	72x720	SouthChicago,Ill. U5
¼	72x720	SparrowsPt.,Md. B2
¼	72x840	Munhall,Pa. U5
¼	76x540	IndianaHarbor,Ind. I-2
¼	78x500	Johnstown,Pa. B2
¼	78x550	Gary,Ind. U5
¼	78x600	Geneva,Utah G1
¼	78x660	SparrowsPt.,Md. B2
¼	78x700	Coatesville,Pa. L7
¼	78x720	Munhall,Pa. U5
¼	78x720	SouthChicago,Ill. U5
¼	80x500	IndianaHarbor,Ind. I-2
¼	84x400	Fontana,Calif. K1
¼	84x480	Geneva,Utah G1
¼	84x480	IndianaHarbor,Ind. I-2
¼	84x480	Johnstown,Pa. B2
¼	84x540	Gary,Ind. U5
¼	84x600	Munhall,Pa. U5
¼	84x630	SparrowsPt.,Md. B2
¼	84x700	Coatesville,Pa. L7
¼	84x720	SouthChicago,Ill. U5
¼	87x550	Munhall,Pa. U5
¼	88x400	IndianaHarbor,Ind. I-2
¼	88x720	SouthChicago,Ill. U5
¼	90x480	Geneva,Utah G1
¼	90x480	Johnstown,Pa. B2
¼	90x500	Gary,Ind. U5
¼	90x500	Munhall,Pa. U5
¼	90x600	SparrowsPt.,Md. B2
¼	90x700	Coatesville,Pa. L7
¼	92x360	IndianaHarbor,Ind. I-2
¼	94x360	IndianaHarbor,Ind. I-2
¼	96x300	IndianaHarbor,Ind. I-2
¼	96x420	Geneva,Utah G1
¼	96x480	Gary,Ind. U5
¼	96x480	Johnstown,Pa. B2
¼	96x480	Munhall,Pa. U5
¼	96x560	SparrowsPt.,Md. B2
¼	96x700	Coatesville,Pa. L7
¼	102x384	Geneva,Utah G1
¼	102x420	Johnstown,Pa. B2
¼	102x450	Gary,Ind. U5
¼	102x480	Munhall,Pa. U5
¼	102x530	SparrowsPt.,Md. B2
¼	102x650	Coatesville,Pa. L7
¼	104x360	Johnstown,Pa. B2
¼	108x240	Harrisburg,Pa. C5
¼	108x360	Johnstown,Pa. B2
¼	108x420	Gary,Ind. U5
¼	108x480	Munhall,Pa. U5
¼	108x500	SparrowsPt.,Md. B2
¼	108x600	Coatesville,Pa. L7
¼	110x330	Johnstown,Pa. B2
¼	114x320	Johnstown,Pa. B2
¼	114x400	Gary,Ind. U5
¼	114x460	SparrowsPt.,Md. B2
¼	114x480	Munhall,Pa. U5
¼	114x600	Coatesville,Pa. L7
¼	120x300	Johnstown,Pa. B2
¼	120x360	Gary,Ind. U5
¼	120x384	Geneva,Utah G1
¼	120x432	SparrowsPt.,Md. B2
¼	120x480	Munhall,Pa. U5
¼	120x600	Coatesville,Pa. L7
¼	126x320	Gary,Ind. U5
¼	126x400	SparrowsPt.,Md. B2
¼	126x480	Munhall,Pa. U5
¼	126x550	Coatesville,Pa. L7
¼	132x300	Gary,Ind. U5
¼	132x360	SparrowsPt.,Md. B2
¼	132x450	Munhall,Pa. U5
¼	132x550	Coatesville,Pa. L7
¼	138x450	Munhall,Pa. U5
¼	138x500	Coatesville,Pa. L7
¼	144x440	Coatesville,Pa. L7
¼	144x450	Munhall,Pa. U5
¼	150x400	Coatesville,Pa. L7
¼	156x400	Coatesville,Pa. L7
¼	162x390	Coatesville,Pa. L7
¼	168x370	Coatesville,Pa. L7
¼	66x420	Conshohocken,Pa. A3
¼	72x360	Conshohocken,Pa. A3
¼–1½	15x480	Aliquippa,Pa. J5
.251–.275	60x180	Ashland,Ky. A10
.276–.3124	60x150	Ashland,Ky. A10
	24x360	Coatesville,Pa. L7
	24x600	Johnstown,Pa. B2
	24x600	SparrowsPt.,Md. B2
	24x720	SouthChicago,Ill. U5
	24x720	SouthChicago,Ill. U5
	24x900	Munhall,Pa. U5
	30x360	Coatesville,Pa. L7
	30x375	Johnstown,Pa. B2
	30x600	SparrowsPt.,Md. B2
	30x720	IndianaHarbor,Ind. I-2
	30x720	SouthChicago,Ill. U5
	30x900	Munhall,Pa. U5
	36x420	Coatesville,Pa. L7
	36x550	Johnstown,Pa. B2
	36x600	Geneva,Utah G1
	36x600	SparrowsPt.,Md. B2
	36x720	IndianaHarbor,Ind. I-2
	36x720	SouthChicago,Ill. U5
	36x900	Munhall,Pa. U5
	42x600	Johnstown,Pa. B2
	42x600	SparrowsPt.,Md. B2
	42x720	IndianaHarbor,Ind. I-2
	42x720	SouthChicago,Ill. U5
	42x900	Munhall,Pa. U5
	48x680	Gary,Ind. U5
	48x700	Coatesville,Pa. L7
	48x720	IndianaHarbor,Ind. I-2
	48x720	SouthChicago,Ill. U5
	48x900	Munhall,Pa. U5
	48⅛x600	Johnstown,Pa. B2
	48⅛x720	SparrowsPt.,Md. B2
	54x600	Johnstown,Pa. B2
	54x660	Gary,Ind. U5
	54x700	Coatesville,Pa. L7
	54x720	IndianaHarbor,Ind. I-2
	54x720	SouthChicago,Ill. U5
	54x720	SparrowsPt.,Md. B2
	54x900	Munhall,Pa. U5
	55x300	Youngstown Y1
	58x290	Youngstown Y1
	60x280	Youngstown Y1
	60x300	Economy,Pa. B14
	60x575	Johnstown,Pa. B2
	60x640	Gary,Ind. U5
	60x700	Coatesville,Pa. L7
	60x720	IndianaHarbor,Ind. I-2
	60x720	SouthChicago,Ill. U5
	60x720	SparrowsPt.,Md. B2
	60x900	Munhall,Pa. U5
	66x260	Youngstown Y10
	66x575	Johnstown,Pa. B2
	66x620	Gary,Ind. U5
	66x700	Coatesville,Pa. L7
	66x720	IndianaHarbor,Ind. I-2
	66x720	SouthChicago,Ill. U5
	66x720	SparrowsPt.,Md. B2
	66x900	Munhall,Pa. U5
	68x250	Youngstown Y1
	70x240	Youngstown Y1
	72x230	Youngstown Y1
	72x550	Johnstown,Pa. B2
	72x600	Gary,Ind. U5
	72x700	Coatesville,Pa. L7
	72x720	IndianaHarbor,Ind. I-2
	72x720	SouthChicago,Ill. U5
	72x840	SparrowsPt.,Md. B2
	72x900	Munhall,Pa. U5
	76x540	IndianaHarbor,Ind. I-2
	78x530	Johnstown,Pa. B2
	78x580	Gary,Ind. U5
	78x600	Geneva,Utah G1
	78x700	Coatesville,Pa. L7
	78x720	SouthChicago,Ill. U5
	78x840	SparrowsPt.,Md. B2
	78x900	Munhall,Pa. U5
	80x500	IndianaHarbor,Ind. I-2
	84x480	Geneva,Utah G1
	84x480	IndianaHarbor,Ind. I-2
	84x500	Johnstown,Pa. B2
	84x560	Gary,Ind. U5
	84x700	Coatesville,Pa. L7
	84x720	SouthChicago,Ill. U5
	84x720	SparrowsPt.,Md. B2
	84x840	Munhall,Pa. U5
	87x780	Munhall,Pa. U5
	88x400	IndianaHarbor,Ind. I-2
	88x720	SouthChicago,Ill. U5
	90x480	Geneva,Utah G1
	90x480	Johnstown,Pa. B2
	90x520	Gary,Ind. U5
	90x660	SparrowsPt.,Md. B2
	90x700	Coatesville,Pa. L7
	90x720	Munhall,Pa. U5
	92x360	IndianaHarbor,Ind. I-2
	94x360	IndianaHarbor,Ind. I-2
	96x360	IndianaHarbor,Ind. I-2
	96x420	Fontana,Calif. K1
	96x420	Geneva,Utah G1
	96x490	Johnstown,Pa. B2
	96x500	Gary,Ind. U5
	96x520	Munhall,Pa. U5
	96x660	SparrowsPt.,Md. B2
	96x700	Coatesville,Pa. L7
	102x384	Geneva,Utah G1
	102x450	Johnstown,Pa. B2
	102x480	Gary,Ind. U5
	102x480	Munhall,Pa. U5
	102x540	SparrowsPt.,Md. B2
	102x650	Coatesville,Pa. L7
	104x400	Johnstown,Pa. B2
	108x400	Johnstown,Pa. B2
	108x470	Gary,Ind. U5
	108x480	Munhall,Pa. U5
	108x540	SparrowsPt.,Md. B2
	108x650	Coatesville,Pa. L7
	110x380	Johnstown,Pa. B2
	114x360	Johnstown,Pa. B2
	114x440	Gary,Ind. U5
	114x450	Coatesville,Pa. L7
	114x480	Munhall,Pa. U5
	114x520	SparrowsPt.,Md. B2
	115x246	Harrisburg,Pa. C5
	120x350	Johnstown,Pa. B2
	120x390	Gary,Ind. U5
	120x400	Coatesville,Pa. L7
	120x480	Munhall,Pa. U5
	120x500	SparrowsPt.,Md. B2
	121x384	Geneva,Utah G1
	126x350	Gary,Ind. U5
	126x380	Coatesville,Pa. L7
	126x480	Munhall,Pa. U5
	126x480	SparrowsPt.,Md. B2
	132x320	Gary,Ind. U5
	132x360	Coatesville,Pa. L7
	132x460	SparrowsPt.,Md. B2
	132x480	Munhall,Pa. U5
	138x300	Gary,Ind. U5
	138x340	Coatesville,Pa. L7
	138x440	SparrowsPt.,Md. B2
	138x450	Munhall,Pa. U5
	144x320	Coatesville,Pa. L7
	144x400	SparrowsPt.,Md. B2
	144x450	Munhall,Pa. U5
	146x360	SparrowsPt.,Md. B2
	150x310	Coatesville,Pa. L7
	150x360	SparrowsPt.,Md. B2
	150x450	Munhall,Pa. U5
	156x300	Coatesville,Pa. L7
	162x290	Coatesville,Pa. L7
	168x280	Coatesville,Pa. L7
	174x250	Coatesville,Pa. L7
.3125–.374	42x180	Ashland,Ky. A10
.3125–.374	60x150	Ashland,Ky. A10
over ⅜	72x360	Cleveland J5
⅜	24x360	Coatesville,Pa. L7
⅜	24x600	Johnstown,Pa. B2
⅜	24x660	SparrowsPt.,Md. B2
⅜	24x720	SouthChicago,Ill. U5
⅜	24x900	Munhall,Pa. U5
⅜	30x600	Johnstown,Pa. B2
⅜	30x660	SparrowsPt.,Md. B2
⅜	30x720	Ind.Harbor,Ind. I-2
⅜	30x720	SouthChicago,Ill. U5
⅜	30x900	Munhall,Pa. U5
⅜	36x420	Coatesville,Pa. L7
⅜	36x600	Geneva,Utah G1
⅜	36x600	Johnstown,Pa. B2
⅜	36x600	SparrowsPt.,Md. B2
⅜	36x720	Ind.Harbor,Ind. I-2
⅜	36x720	SouthChicago,Ill. U5
⅜	36x900	Munhall,Pa. U5
⅜	42x600	Johnstown,Pa. B2
⅜	42x600	SparrowsPt.,Md. B2
⅜	42x720	Ind.Harbor,Ind. I-2
⅜	42x720	SouthChicago,Ill. U5
⅜	42x900	Munhall,Pa. U5
⅜	48x700	Coatesville,Pa. L7
⅜	48x720	Gary,Ind. U5
⅜	48x720	Ind.Harbor,Ind. I-2
⅜	48x720	SouthChicago,Ill. U5
⅜	48x900	Munhall,Pa. U5
⅜	48⅛x720	Johnstown,Pa. B2
⅜	48⅛x840	SparrowsPt.,Md. B2
⅜	50x180	Ashland,Ky. A10
⅜	54x700	Coatesville,Pa. L7
⅜	54x700	Johnstown,Pa. B2
⅜	54x720	Gary,Ind. U5
⅜	54x720	Ind.Harbor,Ind. I-2
⅜	54x720	SouthChicago,Ill. U5
⅜	54x840	SparrowsPt.,Md. B2
⅜	54x900	Munhall,Pa. U5
⅜	60x125	Ashland,Ky. A10
⅜	60x700	Coatesville,Pa. L7
⅜	60x700	Johnstown,Pa. B2
⅜	60x720	Gary,Ind. U5
⅜	60x720	Ind.Harbor,Ind. I-2
⅜	60x720	SouthChicago,Ill. U5
⅜	60x840	SparrowsPt.,Md. B2
⅜	60x900	Munhall,Pa. U5
⅜	66x672	Ind.Harbor,Ind. I-2
⅜	66x700	Coatesville,Pa. L7
⅜	66x700	Johnstown,Pa. B2
⅜	66x720	Gary,Ind. U5
⅜	66x720	SouthChicago,Ill. U5
⅜	66x840	SparrowsPt.,Md. B2
⅜	66x900	Munhall,Pa. U5
⅜	72x612	Ind.Harbor,Ind. I-2
⅜	72x670	Johnstown,Pa. B2
⅜	72x700	Coatesville,Pa. L7

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Plates, Sheared

CONTINUED FROM PRECEDING PAGE

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
	72x720	Gary,Ind. U5
	72x720	SouthChicago,Ill. U5
	72x840	SparrowsPt.,Md. B2
	72x900	Munhall,Pa. U5
	76x540	Ind.Harbor,Ind. I-2
	78x650	Johnstown,Pa. B2
	78x700	Coatesville,Pa. L7
	78x720	Gary,Ind. U5
	78x720	SouthChicago,Ill. U5
	78x840	SparrowsPt.,Md. B2
	78x900	Munhall,Pa. U5
	80x500	Ind.Harbor,Ind. I-2
	81x500	Ind.Harbor,Ind. I-2
	84x600	Johnstown,Pa. B2
	84x700	Coatesville,Pa. L7
	84x720	Gary,Ind. U5
	84x720	SouthChicago,Ill. U5
	84x840	Munhall,Pa. U5
	84x840	SparrowsPt.,Md. B2
	87x780	Munhall,Pa. U5
	88x450	Ind.Harbor,Ind. I-2
	88x720	SouthChicago,Ill. U5
	90x550	Johnstown,Pa. B2
	90x600	Geneva,Utah G1
	90x700	Coatesville,Pa. L7
	90x720	Gary,Ind. U5
	90x720	Munhall,Pa. U5
	90x840	SparrowsPt.,Md. B2
	92x360	Ind.Harbor,Ind. I-2
	94x360	Ind.Harbor,Ind. I-2
	96x360	Ind.Harbor,Ind. I-2
	96x480	Fontana,Calif. K1
	96x480	Geneva,Utah G1
	96x520	Johnstown,Pa. B2
	96x700	Coatesville,Pa. L7
	96x720	Gary,Ind. U5
	96x720	Munhall,Pa. U5
	96x840	SparrowsPt.,Md. B2
	102x420	Geneva,Utah G1
	102x500	Johnstown,Pa. B2
	102x650	Coatesville,Pa. L7
	102x720	Gary,Ind. U5
	102x720	Munhall,Pa. U5
	102x720	SparrowsPt.,Md. B2
	104x475	Johnstown,Pa. B2
	108x384	Geneva,Utah G1
	108x475	Johnstown,Pa. B2
	108x600	Coatesville,Pa. L7
	108x660	Gary,Ind. U5
	108x660	Munhall,Pa. U5
	108x700	SparrowsPt.,Md. B2
	110x450	Johnstown,Pa. B2
	114x430	Johnstown,Pa. B2
	114x540	Coatesville,Pa. L7
	114x600	Gary,Ind. U5
	114x600	Munhall,Pa. U5
	114x660	SparrowsPt.,Md. B2
	115x300	Harrisburg,Pa. C5
	120x420	Johnstown,Pa. B2
	120x480	Munhall,Pa. U5
	120x520	Coatesville,Pa. L7
	120x520	Gary,Ind. U5
	120x620	SparrowsPt.,Md. B2
	121x384	Geneva,Utah G1
	126x480	Gary,Ind. U5
	126x480	Munhall,Pa. U5
	126x500	Coatesville,Pa. L7
	126x600	SparrowsPt.,Md. B2
	132x400	Gary,Ind. U5
	132x460	Coatesville,Pa. L7
	132x480	Munhall,Pa. U5
	132x580	SparrowsPt.,Md. B2
	138x330	Gary,Ind. U5
	138x440	Coatesville,Pa. L7
	138x480	Munhall,Pa. U5
	138x550	SparrowsPt.,Md. B2
	144x300	Gary,Ind. U5
	144x400	Coatesville,Pa. L7
	144x480	Munhall,Pa. U5
	144x520	SparrowsPt.,Md. B2
	146x480	SparrowsPt.,Md. B2
	150x360	Coatesville,Pa. L7
	150x360	SparrowsPt.,Md. B2
	150x480	Munhall,Pa. U5
	156x350	Coatesville,Pa. L7
	162x340	Coatesville,Pa. L7
	168x320	Coatesville,Pa. L7
	174x300	Coatesville,Pa. L7
	180x280	Coatesville,Pa. L7
	186x260	Coatesville,Pa. L7
	192x250	Coatesville,Pa. L7
	195x250	Coatesville,Pa. L7
	72x300	Economy,Pa. B14
	24x360	Coatesville,Pa. L7
	24x600	Johnstown,Pa. B2
	24x600	SparrowsPoint,Md. B2
	24x720	SouthChicago,Ill. U5
	24x900	Munhall,Pa. U5
	30x600	Johnstown,Pa. B2
	30x600	SparrowsPoint,Md. B2
	30x720	IndianaHarbor,Ind. I-2
	30x720	SouthChicago,Ill. U5
	30x900	Munhall,Pa. U5
	36x420	Coatesville,Pa. L7
	36x600	Geneva,Utah G1
	36x600	Johnstown,Pa. B2
	36x600	SparrowsPoint,Md. B2
	36x720	IndianaHarbor,Ind. I-2
	36x720	SouthChicago,Ill. U5
	36x900	Munhall,Pa. U5
	42x650	Johnstown,Pa. B2
	42x650	SparrowsPoint,Md. B2
	42x720	IndianaHarbor,Ind. I-2
	42x720	SouthChicago,Ill. U5
	42x900	Munhall,Pa. U5
	48x684	IndianaHarbor,Ind. I-2
	48x720	Gary,Ind. U5
	48x720	SouthChicago,Ill. U5
	48x800	Coatesville,Pa. L7
	48x900	Munhall,Pa. U5
	48 1/16x740	Johnstown,Pa. B2
	48 1/16x840	SparrowsPt.,Md. B2
	54x684	IndianaHarbor,Ind. I-2
	54x720	Gary,Ind. U5
	54x720	SouthChicago,Ill. U5
	54x730	Johnstown,Pa. B2
	54x800	Coatesville,Pa. L7
	54x840	SparrowsPoint,Md. B2
	54x900	Munhall,Pa. U5
	60x636	IndianaHarbor,Ind. I-2
	60x720	Gary,Ind. U5
	60x720	Johnstown,Pa. B2
	60x720	SouthChicago,Ill. U5
	60x800	Coatesville,Pa. L7
	60x840	SparrowsPoint,Md. B2
	60x900	Munhall,Pa. U5
	66x576	IndianaHarbor,Ind. I-2
	66x700	Johnstown,Pa. B2
	66x720	Gary,Ind. U5
	66x720	SouthChicago,Ill. U5
	66x800	Coatesville,Pa. L7
	66x840	SparrowsPoint,Md. B2
	66x900	Munhall,Pa. U5
	72x540	IndianaHarbor,Ind. I-2
	72x650	Johnstown,Pa. B2
	72x720	Gary,Ind. U5
	72x720	SouthChicago,Ill. U5
	72x800	Coatesville,Pa. L7
	72x840	SparrowsPoint,Md. B2
	72x900	Munhall,Pa. U5
	76x540	IndianaHarbor,Ind. I-2
	78x600	Johnstown,Pa. B2
	78x720	Gary,Ind. U5
	78x720	SouthChicago,Ill. U5
	78x800	Coatesville,Pa. L7
	78x840	SparrowsPoint,Md. B2
	78x900	Munhall,Pa. U5
	80x500	IndianaHarbor,Ind. I-2
	84x500	IndianaHarbor,Ind. I-2
	84x600	Johnstown,Pa. B2
	84x700	SouthChicago,Ill. U5
	84x720	Gary,Ind. U5
	84x800	Coatesville,Pa. L7
	84x840	Munhall,Pa. U5
	84x840	SparrowsPoint,Md. B2
	87x780	Munhall,Pa. U5
	88x450	IndianaHarbor,Ind. I-2
	88x660	SouthChicago,Ill. U5
	90x550	Johnstown,Pa. B2
	90x600	Geneva,Utah G1
	90x720	Gary,Ind. U5
	90x720	Munhall,Pa. U5
	90x800	Coatesville,Pa. L7
	90x840	SparrowsPoint,Md. B2
	92x360	IndianaHarbor,Ind. I-2
	94x360	IndianaHarbor,Ind. I-2
	96x360	IndianaHarbor,Ind. I-2
	96x480	Fontana,Calif. K1
	96x480	Geneva,Utah G1
	96x520	Johnstown,Pa. B2
	96x720	Gary,Ind. U5
	96x720	Munhall,Pa. U5
	96x800	Coatesville,Pa. L7
	96x840	SparrowsPoint,Md. B2
	102x420	Geneva,Utah G1
	102x500	Johnstown,Pa. B2
	102x720	Gary,Ind. U5
	102x720	Munhall,Pa. U5
	102x800	Coatesville,Pa. L7
	102x840	SparrowsPt.,Md. B2
	104x475	Johnstown,Pa. B2
	108x384	Geneva,Utah G1
	108x475	Johnstown,Pa. B2
	108x660	Gary,Ind. U5
	108x700	Coatesville,Pa. L7
	108x720	Munhall,Pa. U5
	108x720	SparrowsPt.,Md. B2
	110x450	Johnstown,Pa. B2
	114x430	Johnstown,Pa. B2
	114x540	Coatesville,Pa. L7
	114x600	Gary,Ind. U5
	114x660	Munhall,Pa. U5
	114x680	SparrowsPt.,Md. B2
	120x420	Johnstown,Pa. B2
	120x520	Gary,Ind. U5
	120x540	Coatesville,Pa. L7
	120x600	Munhall,Pa. U5
	120x640	SparrowsPt.,Md. B2
	121x384	Geneva,Utah G1
	126x480	Gary,Ind. U5
	126x520	Coatesville,Pa. L7
	126x520	Munhall,Pa. U5
	126x620	SparrowsPt.,Md. B2
	132x400	Gary,Ind. U5
	132x480	Munhall,Pa. U5
	132x500	Coatesville,Pa. L7
	132x560	SparrowsPt.,Md. B2
	138x400	Gary,Ind. U5
	138x480	Coatesville,Pa. L7
	138x480	Munhall,Pa. U5
	138x560	SparrowsPt.,Md. B2
	144x360	Gary,Ind. U5
	144x460	Coatesville,Pa. L7
	144x480	Munhall,Pa. U5
	144x540	SparrowsPt.,Md. B2
	146x480	SparrowsPt.,Md. B2
	150x360	SparrowsPt.,Md. B2
	150x440	Coatesville,Pa. L7
	150x480	Munhall,Pa. U5
	156x420	Coatesville,Pa. L7
	162x400	Coatesville,Pa. L7
	168x380	Coatesville,Pa. L7
	174x360	Coatesville,Pa. L7
	180x340	Coatesville,Pa. L7
	186x300	Coatesville,Pa. L7
	192x260	Coatesville,Pa. L7
	195x250	Coatesville,Pa. L7
	115x360	Harrisburg,Pa. C5
	24x360	Coatesville,Pa. L7
	24x450	Johnstown,Pa. B2
	24x600	SparrowsPoint,Md. B2
	24x720	SouthChicago,Ill. U5
	24x900	Munhall,Pa. U5
	30x500	Johnstown,Pa. B2
	30x600	SparrowsPoint,Md. B2
	30x720	IndianaHarbor,Ind. I-2
	30x720	SouthChicago,Ill. U5
	30x900	Munhall,Pa. U5
	36x420	Coatesville,Pa. L7
	36x575	Johnstown,Pa. B2
	36x600	Geneva,Utah G1
	36x600	SparrowsPoint,Md. B2
	36x720	IndianaHarbor,Ind. I-2
	36x720	SouthChicago,Ill. U5
	36x900	Munhall,Pa. U5
	42x648	IndianaHarbor,Ind. I-2
	42x650	Johnstown,Pa. B2
	42x650	SparrowsPoint,Md. B2
	42x720	SouthChicago,Ill. U5
	42x900	Munhall,Pa. U5
	48x600	IndianaHarbor,Ind. I-2
	48x720	Gary,Ind. U5
	48x720	SouthChicago,Ill. U5
	48x800	Coatesville,Pa. L7
	48x900	Munhall,Pa. U5
	48 1/16x740	Johnstown,Pa. B2
	48 1/16x840	SparrowsPt.,Md. B2
	54x600	Ind.Harbor,Ind. I-2
	54x720	Gary,Ind. U5
	54x720	SouthChicago,Ill. U5
	54x730	Johnstown,Pa. B2
	54x800	Coatesville,Pa. L7
	54x840	SparrowsPoint,Md. B2
	54x900	Munhall,Pa. U5
	60x600	IndianaHarbor,Ind. I-2
	60x720	Gary,Ind. U5
	60x720	Johnstown,Pa. B2
	60x720	SouthChicago,Ill. U5
	60x800	Coatesville,Pa. L7
	60x840	SparrowsPoint,Md. B2
	60x900	Munhall,Pa. U5
	66x540	IndianaHarbor,Ind. I-2
	66x700	Johnstown,Pa. B2
	66x720	Gary,Ind. U5
	66x720	SouthChicago,Ill. U5
	66x800	Coatesville,Pa. L7
	66x840	SparrowsPoint,Md. B2
	66x900	Munhall,Pa. U5
	72x540	IndianaHarbor,Ind. I-2
	72x650	Johnstown,Pa. B2
	72x720	Gary,Ind. U5
	72x720	SouthChicago,Ill. U5
	72x800	Coatesville,Pa. L7
	72x840	SparrowsPoint,Md. B2
	72x900	Munhall,Pa. U5
	78x540	IndianaHarbor,Ind. I-2
	78x700	Johnstown,Pa. B2
	78x720	Gary,Ind. U5
	78x720	SouthChicago,Ill. U5
	78x800	Coatesville,Pa. L7
	78x840	SparrowsPoint,Md. B2
	78x900	Munhall,Pa. U5
	80x540	IndianaHarbor,Ind. I-2
	84x540	IndianaHarbor,Ind. I-2
	84x590	Johnstown,Pa. B2
	84x648	SouthChicago,Ill. U5
	84x720	Gary,Ind. U5
	84x800	Coatesville,Pa. L7
	84x840	Munhall,Pa. U5
	84x840	SparrowsPoint,Md. B2
	87x780	Munhall,Pa. U5

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Plates, Sheared

CONTINUED FROM PRECEDING PAGE

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
	88x450	IndianaHarbor,Ind. I-2
	88x630	SouthChicago,Ill. U5
	90x565	Johnstown,Pa. B2
	90x720	Gary,Ind. U5
	90x720	Munhall,Pa. U5
	90x800	Coatesville,Pa. L7
	90x840	SparrowsPoint,Md. B2
	92x360	IndianaHarbor,Ind. I-2
	94x360	IndianaHarbor,Ind. I-2
	96x360	IndianaHarbor,Ind. I-2
	96x480	Fontana,Calif. K1
	96x560	Johnstown,Pa. B2
	96x600	Geneva,Utah G1
	96x720	Gary,Ind. U5
	96x720	Munhall,Pa. U5
	96x800	Coatesville,Pa. L7
	96x840	SparrowsPt.,Md. B2
	102x480	Geneva,Utah G1
	102x550	Johnstown,Pa. B2
	102x720	Gary,Ind. U5
	102x720	Munhall,Pa. U5
	102x800	Coatesville,Pa. L7
	102x840	SparrowsPt.,Md. B2
	104x530	Johnstown,Pa. B2
	108x480	Geneva,Utah G1
	108x530	Johnstown,Pa. B2
	108x700	Coatesville,Pa. L7
	108x720	Gary,Ind. U5
	108x720	Munhall,Pa. U5
	108x840	SparrowsPt.,Md. B2
	110x500	Johnstown,Pa. B2
	114x420	Geneva,Utah G1
	114x460	Johnstown,Pa. B2
	114x540	Coatesville,Pa. L7
	114x660	Gary,Ind. U5
	114x660	Munhall,Pa. U5
	114x720	SparrowsPt.,Md. B2
	120x384	Geneva,Utah G1
	120x430	Johnstown,Pa. B2
	120x540	Coatesville,Pa. L7
	120x580	Gary,Ind. U5
	120x600	Munhall,Pa. U5
	120x720	SparrowsPt.,Md. B2
	121x384	Geneva,Utah G1
	126x520	Gary,Ind. U5
	126x540	Coatesville,Pa. L7
	126x560	Munhall,Pa. U5
	126x720	SparrowsPt.,Md. B2
	132x480	Gary,Ind. U5
	132x520	Munhall,Pa. U5
	132x530	Coatesville,Pa. L7
	132x720	SparrowsPt.,Md. B2
	138x440	Gary,Ind. U5
	138x480	Munhall,Pa. U5
	138x500	Coatesville,Pa. L7
	138x720	SparrowsPt.,Md. B2
	144x400	Gary,Ind. U5
	144x480	Coatesville,Pa. L7
	144x480	Munhall,Pa. U5
	144x650	SparrowsPt.,Md. B2
	146x480	SparrowsPt.,Md. B2
	150x360	SparrowsPt.,Md. B2
	150x450	Coatesville,Pa. L7
	150x480	Munhall,Pa. U5
	156x440	Coatesville,Pa. L7
	162x430	Coatesville,Pa. L7
	168x400	Coatesville,Pa. L7
	174x375	Coatesville,Pa. L7
	180x360	Coatesville,Pa. L7
	186x325	Coatesville,Pa. L7
	192x275	Coatesville,Pa. L7
	195x250	Coatesville,Pa. L7
	24x360	Coatesville,Pa. L7
	24x425	Johnstown,Pa. B2
	24x600	SparrowsPoint,Md. B2
	24x720	SouthChicago,Ill. U5
	24x900	Munhall,Pa. U5
	30x500	Johnstown,Pa. B2
	30x600	SparrowsPoint,Md. B2
	30x720	IndianaHarbor,Ind. I-2
	30x720	SouthChicago,Ill. U5
	30x900	Munhall,Pa. U5
	36x420	Coatesville,Pa. L7
	36x575	Johnstown,Pa. B2
	36x600	Geneva,Utah G1
	36x600	SparrowsPoint,Md. B2
	36x720	IndianaHarbor,Ind. I-2
	36x720	SouthChicago,Ill. U5
	36x900	Munhall,Pa. U5
	42x600	IndianaHarbor,Ind. I-2
	42x650	Johnstown,Pa. B2
	42x650	SparrowsPoint,Md. B2
	42x720	SouthChicago,Ill. U5
	42x900	Munhall,Pa. U5
	48x600	IndianaHarbor,Ind. I-2
	48x720	Gary,Ind. U5
	48x720	SouthChicago,Ill. U5
	48x800	Coatesville,Pa. L7
	48x900	Munhall,Pa. U5
	48 1/2x740	Johnstown,Pa. B2
	48 1/2x840	SparrowsPt.,Md. B2
	54x600	Ind.Harbor,Ind. I-2
	54x720	Gary,Ind. U5
	54x720	SouthChicago,Ill. U5
	54x730	Johnstown,Pa. B2
	54x800	Coatesville,Pa. L7
	54x840	SparrowsPoint,Md. B2
	54x900	Munhall,Pa. U5
	60x600	IndianaHarbor,Ind. I-2
	60x655	SouthChicago,Ill. U5
	60x720	Gary,Ind. U5
	60x720	Johnstown,Pa. B2
	60x800	Coatesville,Pa. L7
	60x840	SparrowsPoint,Md. B2
	60x900	Munhall,Pa. U5
	66x540	IndianaHarbor,Ind. I-2
	66x700	Johnstown,Pa. B2
	66x720	Gary,Ind. U5
	66x720	SouthChicago,Ill. U5
	66x800	Coatesville,Pa. L7
	66x840	SparrowsPoint,Md. B2
	66x900	Munhall,Pa. U5
	72x540	IndianaHarbor,Ind. I-2
	72x650	Johnstown,Pa. B2
	72x670	SouthChicago,Ill. U5
	72x720	Gary,Ind. U5
	72x800	Coatesville,Pa. L7
	72x840	SparrowsPoint,Md. B2
	72x900	Munhall,Pa. U5
	76x540	IndianaHarbor,Ind. I-2
	78x600	Johnstown,Pa. B2
	78x610	SouthChicago,Ill. U5
	78x720	Gary,Ind. U5
	78x800	Coatesville,Pa. L7
	78x840	SparrowsPoint,Md. B2
	78x900	Munhall,Pa. U5
	80x540	IndianaHarbor,Ind. I-2
	84x480	IndianaHarbor,Ind. I-2
	84x576	SouthChicago,Ill. U5
	84x590	Johnstown,Pa. B2
	84x720	Gary,Ind. U5
	84x800	Coatesville,Pa. L7
	84x840	Munhall,Pa. U5
	84x840	SparrowsPoint,Md. B2
	87x780	Munhall,Pa. U5
	88x420	IndianaHarbor,Ind. I-2
	90x540	Johnstown,Pa. B2
	90x720	Gary,Ind. U5
	90x720	Munhall,Pa. U5
	90x800	Coatesville,Pa. L7
	90x840	SparrowsPoint,Md. B2
	92x360	IndianaHarbor,Ind. I-2
	94x360	IndianaHarbor,Ind. I-2
	96x360	IndianaHarbor,Ind. I-2
	96x480	Fontana,Calif. K1
	96x530	Johnstown,Pa. B2
	96x600	Geneva,Utah G1
	96x720	Gary,Ind. U5
	96x720	Munhall,Pa. U5
	96x800	Coatesville,Pa. L7
	96x840	SparrowsPoint,Md. B2
	102x480	Geneva,Utah G1
	102x500	Johnstown,Pa. B2
	102x720	Gary,Ind. U5
	102x720	Munhall,Pa. U5
	102x800	Coatesville,Pa. L7
	102x840	SparrowsPt.,Md. B2
	104x475	Johnstown,Pa. B2
	108x475	Johnstown,Pa. B2
	108x480	Geneva,Utah G1
	108x700	Coatesville,Pa. L7
	108x720	Gary,Ind. U5
	108x720	Munhall,Pa. U5
	108x840	SparrowsPt.,Md. B2
	110x450	Johnstown,Pa. B2
	114x420	Geneva,Utah G1
	114x430	Johnstown,Pa. B2
	114x540	Coatesville,Pa. L7
	114x660	Gary,Ind. U5
	114x720	Munhall,Pa. U5
	114x720	SparrowsPt.,Md. B2
	120x384	Geneva,Utah G1
	120x420	Johnstown,Pa. B2
	120x540	Coatesville,Pa. L7
	120x580	Gary,Ind. U5
	120x720	Munhall,Pa. U5
	120x720	SparrowsPt.,Md. B2
	121x384	Geneva,Utah G1
	126x520	Gary,Ind. U5
	126x540	Coatesville,Pa. L7
	126x660	Munhall,Pa. U5
	126x720	SparrowsPt.,Md. B2
	132x480	Gary,Ind. U5
	132x535	Coatesville,Pa. L7
	132x600	Munhall,Pa. U5
	132x720	SparrowsPt.,Md. B2
	138x440	Gary,Ind. U5
	138x500	Coatesville,Pa. L7
	138x540	Munhall,Pa. U5
	138x720	SparrowsPt.,Md. B2
	144x420	Gary,Ind. U5
	144x480	Munhall,Pa. U5
	144x500	Coatesville,Pa. L7
	144x650	SparrowsPt.,Md. B2
	146x480	SparrowsPt.,Md. B2
	150x360	SparrowsPt.,Md. B2
	150x480	Coatesville,Pa. L7
	150x480	Munhall,Pa. U5
	156x450	Coatesville,Pa. L7
	162x450	Coatesville,Pa. L7
	168x400	Coatesville,Pa. L7
	174x375	Coatesville,Pa. L7
	180x360	Coatesville,Pa. L7
	186x325	Coatesville,Pa. L7
	192x275	Coatesville,Pa. L7
	195x250	Coatesville,Pa. L7
	24x360	Coatesville,Pa. L7
	24x400	Johnstown,Pa. B2
	24x600	SparrowsPoint,Md. B2
	24x720	SouthChicago,Ill. U5
	24x900	Munhall,Pa. U5
	30x425	Johnstown,Pa. B2
	30x600	SparrowsPoint,Md. B2
	30x684	IndianaHarbor,Ind. I-2
	30x720	SouthChicago,Ill. U5
	30x900	Munhall,Pa. U5
	36x420	Coatesville,Pa. L7
	36x575	Johnstown,Pa. B2
	36x600	Geneva,Utah G1
	36x600	SparrowsPoint,Md. B2
	36x684	IndianaHarbor,Ind. I-2
	36x720	SouthChicago,Ill. U5
	36x900	Munhall,Pa. U5
	42x600	IndianaHarbor,Ind. I-2
	42x650	Johnstown,Pa. B2
	42x650	SparrowsPoint,Md. B2
	42x720	SouthChicago,Ill. U5
	42x900	Munhall,Pa. U5
	48x600	IndianaHarbor,Ind. I-2
	48x720	Gary,Ind. U5
	48x720	SouthChicago,Ill. U5
	48x800	Coatesville,Pa. L7
	48x900	Munhall,Pa. U5
	48 1/2x710	Johnstown,Pa. B2
	48 1/2x840	SparrowsPt.,Md. B2
	54x600	Ind.Harbor,Ind. I-2
	54x700	Johnstown,Pa. B2
	54x720	Gary,Ind. U5
	54x720	SouthChicago,Ill. U5
	54x800	Coatesville,Pa. L7
	54x840	SparrowsPoint,Md. B2
	54x900	Munhall,Pa. U5
	60x600	IndianaHarbor,Ind. I-2
	60x600	SouthChicago,Ill. U5
	60x630	Johnstown,Pa. B2
	60x720	Gary,Ind. U5
	60x800	Coatesville,Pa. L7
	60x840	SparrowsPoint,Md. B2
	60x900	Munhall,Pa. U5
	66x312	Conshohocken,Pa. A3
	66x540	IndianaHarbor,Ind. I-2
	66x650	Johnstown,Pa. B2
	66x660	SouthChicago,Ill. U5
	66x720	Gary,Ind. U5
	66x800	Coatesville,Pa. L7
	66x840	SparrowsPoint,Md. B2
	66x900	Munhall,Pa. U5
	72x300	Conshohocken,Pa. A3
	72x540	IndianaHarbor,Ind. I-2
	72x600	SouthChicago,Ill. U5
	72x625	Johnstown,Pa. B2
	72x720	Gary,Ind. U5
	72x800	Coatesville,Pa. L7
	72x840	SparrowsPoint,Md. B2
	72x900	Munhall,Pa. U5
	76x540	IndianaHarbor,Ind. I-2
	78x552	SouthChicago,Ill. U5
	78x600	Johnstown,Pa. B2
	78x720	Gary,Ind. U5
	78x800	Coatesville,Pa. L7
	78x840	SparrowsPoint,Md. B2
	78x900	Munhall,Pa. U5
	80x480	IndianaHarbor,Ind. I-2
	84x480	IndianaHarbor,Ind. I-2
	84x515	SouthChicago,Ill. U5
	84x575	Johnstown,Pa. B2
	84x600	Geneva,Utah G1
	84x720	Gary,Ind. U5
	84x800	Coatesville,Pa. L7
	84x840	Munhall,Pa. U5
	84x840	SparrowsPoint,Md. B2
	87x780	Munhall,Pa. U5
	88x360	IndianaHarbor,Ind. I-2
	90x525	Johnstown,Pa. B2
	90x550	Geneva,Utah G1
	90x720	Gary,Ind. U5
	90x720	Munhall,Pa. U5
	90x800	Coatesville,Pa. L7
	90x840	SparrowsPoint,Md. B2
	92x360	IndianaHarbor,Ind. I-2
	94x360	IndianaHarbor,Ind. I-2
	96x360	IndianaHarbor,Ind. I-2
	96x480	Fontana,Calif. K1
	96x480	Geneva,Utah G1
	96x500	Johnstown,Pa. B2
	96x720	Gary,Ind. U5
	96x720	Munhall,Pa. U5
	96x800	Coatesville,Pa. L7
	96x840	SparrowsPoint,Md. B2
	102x475	Johnstown,Pa. B2
	102x480	Geneva,Utah G1

(Code number following mill point indicates producing company, key on

Hot-Rolled Plates, Sheared

CONTINUED FROM PRECEDING PAGE

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
	102x720	Gary,Ind. U5
	102x720	Munhall,Pa. U5
	102x800	Coatesville,Pa. L7
	102x840	SparrowsPt.,Md. B2
	104x460	Johnstown,Pa. B2
	108x460	Johnstown,Pa. B2
	108x480	Geneva,Utah G1
	108x700	Coatesville,Pa. L7
	108x720	Gary,Ind. U5
	108x720	Munhall,Pa. U5
	108x840	SparrowsPt.,Md. B2
	110x450	Johnstown,Pa. B2
	114x360	Geneva,Utah G1
	114x430	Johnstown,Pa. B2
	114x540	Coatesville,Pa. L7
	114x660	Gary,Ind. U5
	114x720	Munhall,Pa. U5
	114x720	SparrowsPt.,Md. B2
	120x360	Geneva,Utah G1
	120x420	Johnstown,Pa. B2
	120x540	Coatesville,Pa. L7
	120x600	Gary,Ind. U5
	120x720	Munhall,Pa. U5
	120x720	SparrowsPt.,Md. B2
	121x360	Geneva,Utah G1
	126x540	Coatesville,Pa. L7
	126x540	Gary,Ind. U5
	126x660	Munhall,Pa. U5
	126x720	SparrowsPt.,Md. B2
	132x500	Gary,Ind. U5
	132x540	Coatesville,Pa. L7
	132x600	Munhall,Pa. U5
	132x720	SparrowsPt.,Md. B2
	138x480	Gary,Ind. U5
	138x500	Coatesville,Pa. L7
	138x540	Munhall,Pa.U5
	138x720	SparrowsPt.,Md. B2
	144x420	Gary,Ind. U5
	144x500	Coatesville,Pa. L7
	144x520	Munhall,Pa. U5
	144x650	SparrowsPt.,Md. B2
	146x480	SparrowsPt.,Md. B2
	148x360	Gary,Ind. U5
	150x360	SparrowsPt.,Md. B2
	150x480	Coatesville,Pa. L7
	150x500	Munhall,Pa. U5
	156x450	Coatesville,Pa. L7
	162x450	Coatesville,Pa. L7
	16nx400	Coatesville,Pa. L7
	174x375	Coatesville,Pa. L7
	180x360	Coatesville,Pa. L7
	186x325	Coatesville,Pa. L7
	192x275	Coatesville,Pa. L7
	195x250	Coatesville,Pa. L7
over 5/8—3/4	72x300	Cleveland J5
	24x360	Coatesville,Pa. L7
	24x400	Johnstown,Pa. B2
	24x600	SparrowsPoint,Md. B2
	24x720	SouthChicago,Ill. U5
	24x900	Munhall,Pa. U5
	30x475	Johnstown,Pa. B2
	30x600	SparrowsPoint,Md. B2
	30x720	SouthChicago,Ill. U5
	30x900	Munhall,Pa. U5
	36x420	Coatesville,Pa. L7
	36x575	Johnstown,Pa. B2
	36x600	Geneva,Utah G1
	36x600	SparrowsPoint,Md. B2
	36x720	SouthChicago,Ill. U5
	36x900	Munhall,Pa. U5
	42x600	Johnstown,Pa. B2
	42x650	SparrowsPoint,Md. B2
	42x720	SouthChicago,Ill. U5
	42x900	Munhall,Pa. U5
	48x720	Gary,Ind. U5
	48x720	SouthChicago,Ill. U5
	48x800	Coatesville,Pa. L7
	48x900	Munhall,Pa. U5
	48 1/16x650	Johnstown,Pa. B2
	48 1/16x840	SparrowsPt.,Md. B2
	54x650	Johnstown,Pa. B2
	54x720	Gary,Ind. U5
	54x720	SouthChicago,Ill. U5
	54x800	Coatesville,Pa. L7
	54x840	SparrowsPoint,Md. B2
	54x900	Munhall,Pa. U5
	60x538	SouthChicago,Ill. U5
	60x630	Johnstown,Pa. B2
	60x720	Gary,Ind. U5
	60x800	Coatesville,Pa. L7
	60x840	SparrowsPoint,Md. B2
	60x900	Munhall,Pa. U5
	66x600	SouthChicago,Ill. U5
	66x620	Johnstown,Pa. B2
	66x720	Gary,Ind. U5
	66x800	Coatesville,Pa. L7
	66x840	SparrowsPoint,Md. B2
	66x864	Munhall,Pa. U5
	72x545	SouthChicago,Ill. U5
	72x600	Johnstown,Pa. B2
	72x720	Gary,Ind. U5
	72x800	Coatesville,Pa. L7
	72x840	SparrowsPoint,Md. B2
	72x864	Munhall,Pa. U5
	78x490	SouthChicago,Ill. U5
	78x575	Johnstown,Pa. B2
	78x600	Geneva,Utah G1
	78x720	Gary,Ind. U5
	78x800	Coatesville,Pa. L7
	78x840	Munhall,Pa. U5
	78x840	SparrowsPoint,Md. B2
	84x458	SouthChicago,Ill. U5
	84x550	Johnstown,Pa. B2
	84x570	Geneva,Utah G1
	84x720	Gary,Ind. U5
	84x780	Munhall,Pa. U5
	84x800	Coatesville,Pa. L7
	84x840	SparrowsPoint,Md. B2
	87x750	Munhall,Pa. U5
	90x500	Geneva,Utah G1
	90x500	Johnstown,Pa. B2
	90x720	Gary,Ind. U5
	90x720	Munhall,Pa. U5
	90x800	Coatesville,Pa.L7
	90x840	SparrowsPoint,Md. B2
	96x458	Fontana,Calif. K1
	96x475	Johnstown,Pa. B2
	96x480	Geneva,Utah G1
	96x720	Gary,Ind. U5
	96x720	Munhall,Pa. U5
	96x800	Coatesville,Pa. L7
	96x840	SparrowsPoint,Md. B2
	102x420	Geneva,Utah G1
	102x450	Johnstown,Pa. B2
	102x720	Gary,Ind. U5
	102x720	Munhall,Pa. U5
	102x750	Coatesville,Pa. L7
	102x840	SparrowsPt.,Md. B2
	104x440	Johnstown,Pa. B2
	108x360	Geneva,Utah G1
	108x440	Johnstown,Pa. B2
	108x720	Coatesville,Pa. L7
	108x720	Gary,Ind. U5
	108x720	Munhall,Pa. U5
	108x840	SparrowsPt.,Md. B2
	110x425	Johnstown,Pa. B2
	114x400	Johnstown,Pa. B2
	114x540	Coatesville,Pa. L7
	114x660	Gary,Ind. U5
	114x720	Munhall,Pa. U5
	114x720	SparrowsPt.,Md. B2
	120x400	Johnstown,Pa. B2
	120x540	Coatesville,Pa. L7
	120x600	Gary,Ind. U5
	120x720	Munhall,Pa. U5
	120x720	SparrowsPt.,Md. B2
	121x360	Geneva,Utah G1
	126x540	Coatesville,Pa. L7
	126x540	Gary,Ind. U5
	126x720	Munhall,Pa. U5
	126x720	SparrowsPt.,Md. B2
	132x500	Gary,Ind. U5
	132x540	Coatesville,Pa. L7
	132x660	Munhall,Pa. U5
	132x720	SparrowsPt.,Md. B2
	138x480	Gary,Ind. U5
	138x540	Coatesville,Pa. L7
	138x600	Munhall,Pa. U5
	138x720	SparrowsPt.,Md. B2
	144x420	Gary,Ind. U5
	144x540	Coatesville,Pa. L7
	144x560	Munhall,Pa. U5
	144x650	SparrowsPt.,Md. B2
	146x480	SparrowsPt.,Md. B2
	148x360	Gary,Ind. U5
	150x360	SparrowsPt.,Md. B2
	150x540	Coatesville,Pa. L7
	150x540	Munhall,Pa. U5
	156x540	Coatesville,Pa. L7
	162x540	Coatesville,Pa. L7
	168x540	Coatesville,Pa. L7
	174x500	Coatesville,Pa. L7
	180x475	Coatesville,Pa. L7
	186x400	Coatesville,Pa. L7
	192x275	Coatesville,Pa. L7
	195x250	Coatesville,Pa. L7
	24x360	Coatesville,Pa. L7
	24x400	Johnstown,Pa. B2
	24x600	SparrowsPoint,Md. B2
	24x720	SouthChicago,Ill. U5
	24x900	Munhall,Pa. U5
	30x475	Johnstown,Pa. B2
	30x564	IndianaHarbor,Ind. I-2
	30x600	SparrowsPoint,Md. B2
	30x720	SouthChicago,Ill. U5
	30x900	Munhall,Pa. U5
	36x420	Coatesville,Pa. L7
	36x550	Johnstown,Pa. B2
	36x564	IndianaHarbor,Ind. I-2
	36x600	Geneva,Utah G1
	36x600	SparrowsPoint,Md. B2
	36x720	SouthChicago,Ill. U5
	36x900	Munhall,Pa. U5
	42x540	IndianaHarbor,Ind. I-2
	42x600	Johnstown,Pa. B2
	42x650	SparrowsPoint,Md. B2
	42x720	SouthChicago,Ill. U5
	42x900	Munhall,Pa. U5
	48x540	IndianaHarbor,Ind. I-2
	48x720	Gary,Ind. U5
	48x720	SouthChicago,Ill. U5
	48x800	Coatesville,Pa. L7
	48x900	Munhall,Pa. U5
	48 1/16x650	Johnstown,Pa. B2
	48 1/16x840	SparrowsPt.,Md. B2
	54x540	IndianaHarbor,Ind. I-2
	54x650	Johnstown,Pa. B2
	54x720	Gary,Ind. U5
	54x720	SouthChicago,Ill. U5
	54x800	Coatesville,Pa. L7
	54x840	SparrowsPoint,Md. B2
	54x900	Munhall,Pa. U5
	60x493	SouthChicago,Ill. U5
	60x540	IndianaHarbor,Ind. I-2
	60x640	Johnstown,Pa. B2
	60x720	Gary,Ind. U5
	60x800	Coatesville,Pa. L7
	60x840	SparrowsPoint,Md. B2
	60x900	Munhall,Pa. U5
	66x276	Conshohocken,Pa. A3
	66x540	IndianaHarbor,Ind. I-2
	66x548	SouthChicago,Ill. U5
	66x620	Johnstown,Pa. B2
	66x720	Gary,Ind. U5
	66x792	Munhall,Pa. U5
	66x800	Coatesville,Pa. L7
	66x840	SparrowsPoint,Md. B2
	72x264	Conshohocken,Pa. A3
	72x492	IndianaHarbor,Ind. I-2
	72x500	SouthChicago,Ill. U5
	72x600	Johnstown,Pa. B2
	72x720	Gary,Ind. U5
	72x792	Munhall,Pa. U5
	72x800	Coatesville,Pa. L7
	72x840	SparrowsPoint,Md. B2
	76x468	IndianaHarbor,Ind. I-2
	78x452	SouthChicago,Ill. U5
	78x575	Johnstown,Pa. B2
	78x600	Geneva,Utah G1
	78x720	Gary,Ind. U5
	78x780	Munhall,Pa. U5
	78x800	Coatesville,Pa. L7
	78x840	SparrowsPoint,Md. B2
	80x444	IndianaHarbor,Ind. I-2
	84x420	IndianaHarbor,Ind. I-2
	84x420	SouthChicago,Ill. U5
	84x550	Geneva,Utah G1
	84x550	Johnstown,Pa. B2
	84x720	Gary,Ind. U5
	84x720	Munhall,Pa. U5
	84x800	Coatesville,Pa. L7
	84x840	SparrowsPoint,Md. B2
	87x720	Munhall,Pa. U5
	88x360	IndianaHarbor,Ind. I-2
	90x450	Geneva,Utah G1
	90x500	Johnstown,Pa. B2
	90x720	Gary,Ind. U5
	90x720	Munhall,Pa. U5
	90x800	Coatesville,Pa. L7
	90x840	SparrowsPoint,Md. B2
	92x360	IndianaHarbor,Ind. I-2
	94x360	IndianaHarbor,Ind. I-2
	96x360	IndianaHarbor,Ind. I-2
	96x400	Geneva,Utah G1
	96x420	Fontana,Calif. K1
	96x475	Johnstown,Pa. B2
	96x720	Gary,Ind. U5
	96x720	Munhall,Pa. U5
	96x750	Coatesville,Pa. L7
	96x840	SparrowsPoint,Md. B2
	102x360	Geneva,Utah G1
	102x450	Johnstown,Pa. B2
	102x720	Coatesville,Pa. L7
	102x720	Gary,Ind. U5
	102x720	Munhall,Pa. U5
	102x840	SparrowsPt.,Md. B2
	104x425	Johnstown,Pa. B2
	108x425	Johnstown,Pa. B2
	108x720	Coatesville,Pa. L7
	108x720	Gary,Ind. U5
	108x720	Munhall,Pa. U5
	108x840	SparrowsPt.,Md. B2
	110x420	Johnstown,Pa. B2
	114x400	Johnstown,Pa. B2
	114x540	Coatesville,Pa. L7
	114x660	Gary,Ind. U5
	114x720	Munhall,Pa. U5
	114x720	SparrowsPt.,Md. B2
	115x336	Harrisburg,Pa. C5
	120x360	Geneva,Utah G1
	120x380	Johnstown,Pa. B2
	120x540	Coatesville,Pa. L7
	120x660	Gary,Ind. U5
	120x720	Munhall,Pa. U5
	120x720	SparrowsPt.,Md. B2
	121x340	Geneva,Utah G1
	126x540	Coatesville,Pa. L7
	126x540	Gary,Ind. U5
	126x720	Munhall,Pa. U5
	126x720	SparrowsPt.,Md. B2
	132x520	Gary,Ind. U5
	132x540	Coatesville,Pa. L7

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Plates, Sheared

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Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
¼	132x660	Munhall,Pa. U5
¼	132x720	SparrowsPt.,Md. B2
¼	138x480	Gary,Ind. U5
¼	138x540	Coatesville,Pa. L7
¼	138x600	Munhall,Pa. U5
¼	138x720	SparrowsPt.,Md. B2
¼	144x420	Gary,Ind. U5
¼	144x540	Coatesville,Pa. L7
¼	144x560	Munhall,Pa. U5
¼	144x650	SparrowsPt.,Md. B2
¼	146x480	SparrowsPt.,Md. B2
¼	148x360	Gary,Ind. U5
¼	150x360	SparrowsPt.,Md. B2
¼	150x540	Coatesville,Pa. L7
¼	150x560	Munhall,Pa. U5
¼	156x540	Coatesville,Pa. L7
¼	162x540	Coatesville,Pa. L7
¼	168x540	Coatesville,Pa. L7
¼	174x500	Coatesville,Pa. L7
¼	180x475	Coatesville,Pa. L7
¼	186x400	Coatesville,Pa. L7
¼	192x300	Coatesville,Pa. L7
¼	195x250	Coatesville,Pa. L7
¼	24x100	Johnstown,Pa. B2
¼	24x495	Munhall,Pa. U5
¼	24x600	SparrowsPt.,Md. B2
¼	30x450	Johnstown,Pa. B2
¼	30x515	Munhall,Pa. U5
¼	30x600	SparrowsPt.,Md. B2
¼	36x480	Geneva,Utah G1
¼	36x520	Munhall,Pa. U5
¼	36x525	Johnstown,Pa. B2
¼	36x600	SparrowsPt.,Md. B2
¼	42x520	Munhall,Pa. U5
¼	42x575	Johnstown,Pa. B2
¼	42x650	SparrowsPt.,Md. B2
¼	48x600	Munhall,Pa. U5
¼	48x720	Gary,Ind. U5
¼	48 1/16 x600	Johnstown,Pa. B2
¼	48 1/16 x840	SparrowsPt.,Md. B2
¼	54x625	Johnstown,Pa. B2
¼	54x660	Munhall,Pa. U5
¼	54x720	Gary,Ind. U5
¼	54x840	SparrowsPt.,Md. B2
¼	60x610	Johnstown,Pa. B2
¼	60x720	Gary,Ind. U5
¼	60x720	Munhall,Pa. U5
¼	60x840	SparrowsPt.,Md. B2
¼	66x550	Johnstown,Pa. B2
¼	66x720	Gary,Ind. U5
¼	66x720	Munhall,Pa. U5
¼	66x840	SparrowsPt.,Md. B2
¼	72x560	Johnstown,Pa. B2
¼	72x720	Gary,Ind. U5
¼	72x720	Munhall,Pa. U5
¼	72x840	SparrowsPt.,Md. B2
¼	78x555	Johnstown,Pa. B2
¼	78x720	Gary,Ind. U5
¼	78x720	Munhall,Pa. U5
¼	78x840	SparrowsPt.,Md. B2
¼	84x480	Geneva,Utah G1
¼	84x510	Johnstown,Pa. B2
¼	84x720	Gary,Ind. U5
¼	84x720	Munhall,Pa. U5
¼	84x840	SparrowsPt.,Md. B2
¼	87x720	Munhall,Pa. U5
¼	90x420	Geneva,Utah G1
¼	90x500	Johnstown,Pa. B2
¼	90x720	Gary,Ind. U5
¼	90x720	Munhall,Pa. U5
¼	90x840	SparrowsPt.,Md. B2
¼	96x360	Geneva,Utah G1
¼	96x450	Johnstown,Pa. B2
¼	96x720	Gary,Ind. U5
¼	96x720	Munhall,Pa. U5
¼	96x840	SparrowsPt.,Md. B2
¼	102x400	Johnstown,Pa. B2
¼	102x720	Gary,Ind. U5
¼	102x720	Munhall,Pa. U5
¼	102x840	SparrowsPt.,Md. B2
¼	104x375	Johnstown,Pa. B2
¼	108x375	Johnstown,Pa. B2
¼	108x720	Gary,Ind. U5
¼	108x720	Munhall,Pa. U5
¼	108x840	SparrowsPt.,Md. B2
¼	110x360	Johnstown,Pa. B2
¼	114x350	Johnstown,Pa. B2
¼	114x360	Geneva,Utah G1
¼	114x660	Gary,Ind. U5
¼	114x720	Munhall,Pa. U5
¼	114x720	SparrowsPt.,Md. B2
¼	120x300	Johnstown,Pa. B2
¼	120x330	Geneva,Utah G1
¼	120x600	Gary,Ind. U5
¼	120x720	Munhall,Pa. U5
¼	120x720	SparrowsPt.,Md. B2
¼	126x540	Gary,Ind. U5
¼	126x720	Munhall,Pa. U5
¼	126x720	SparrowsPt.,Md. B2
¼	132x520	Gary,Ind. U5
¼	132x660	Munhall,Pa. U5
¼	132x720	SparrowsPt.,Md. B2
¼	138x480	Gary,Ind. U5
¼	138x540	Coatesville,Pa. L7
¼	138x600	Munhall,Pa. U5
¼	138x720	SparrowsPt.,Md. B2
¼	144x420	Gary,Ind. U5
¼	144x540	Coatesville,Pa. L7
¼	144x560	Munhall,Pa. U5
¼	144x650	SparrowsPt.,Md. B2
¼	146x480	SparrowsPt.,Md. B2
¼	148x360	Gary,Ind. U5
¼	150x360	SparrowsPt.,Md. B2
¼	150x540	Coatesville,Pa. L7
¼	150x540	Munhall,Pa. U5
¼	156x540	Coatesville,Pa. L7
¼	162x540	Coatesville,Pa. L7
¼	168x540	Coatesville,Pa. L7
¼	174x500	Coatesville,Pa. L7
¼	180x475	Coatesville,Pa. L7
¼	186x400	Coatesville,Pa. L7
¼	192x300	Coatesville,Pa. L7
¼	195x250	Coatesville,Pa. L7
¼	24x350	Johnstown,Pa. B2
¼	30x425	Johnstown,Pa. B2
¼	36x525	Johnstown,Pa. B2
¼	42x550	Johnstown,Pa. B2
¼	48 1/16 x590	Johnstown,Pa. B2
¼	54x580	Johnstown,Pa. B2
¼	60x575	Johnstown,Pa. B2
¼	66x550	Johnstown,Pa. B2
¼	72x525	Johnstown,Pa. B2
¼	78x500	Johnstown,Pa. B2
¼	84x475	Johnstown,Pa. B2
¼	90x450	Johnstown,Pa. B2
¼	96x425	Johnstown,Pa. B2
¼	102x400	Johnstown,Pa. B2
¼	104x350	Johnstown,Pa. B2
¼	108x350	Johnstown,Pa. B2
¼	110x320	Johnstown,Pa. B2
¼	114x310	Johnstown,Pa. B2
¼	120x290	Johnstown,Pa. B2
1	24x350	Johnstown,Pa. B2
1	24x360	Coatesville,Pa. L7
1	24x450	Munhall,Pa. U5
1	24x600	SparrowsPt.,Md. B2
1	30x425	Johnstown,Pa. B2
1	30x465	Munhall,Pa. U5
1	30x540	IndianaHarbor,Ind. I-2
1	30x600	SparrowsPt.,Md. B2
1	36x420	Coatesville,Pa. L7
1	36x480	Geneva,Utah G1
1	36x520	Munhall,Pa. U5
1	36x540	IndianaHarbor,Ind. I-2
1	36x540	Johnstown,Pa. B2
1	36x600	SparrowsPt.,Md. B2
1	42x520	Munhall,Pa. U5
1	42x525	Johnstown,Pa. B2
1	42x540	IndianaHarbor,Ind. I-2
1	42x650	SparrowsPt.,Md. B2
1	48x540	IndianaHarbor,Ind. I-2
1	48x600	Munhall,Pa. U5
1	48x720	Gary,Ind. U5
1	48x800	Coatesville,Pa. L7
1	48 1/16 x570	Johnstown,Pa. B2
1	48 1/16 x840	SparrowsPt.,Md. B2
1	54x492	IndianaHarbor,Ind. I-2
1	54x560	Johnstown,Pa. B2
1	54x660	Munhall,Pa. U5
1	54x720	Gary,Ind. U5
1	54x800	Coatesville,Pa. L7
1	54x840	SparrowsPt.,Md. B2
1	60x432	IndianaHarbor,Ind. I-2
1	60x550	Johnstown,Pa. B2
1	60x720	Gary,Ind. U5
1	60x720	Munhall,Pa. U5
1	60x800	Coatesville,Pa. L7
1	60x840	SparrowsPt.,Md. B2
1	66x408	IndianaHarbor,Ind. I-2
1	66x525	Johnstown,Pa. B2
1	66x720	Gary,Ind. U5
1	66x720	Munhall,Pa. U5
1	66x800	Coatesville,Pa. L7
1	66x840	SparrowsPt.,Md. B2
1	72x360	IndianaHarbor,Ind. I-2
1	72x500	Johnstown,Pa. B2
1	72x720	Gary,Ind. U5
1	72x720	Munhall,Pa. U5
1	72x750	Coatesville,Pa. L7
1	72x840	SparrowsPt.,Md. B2
1	76x336	IndianaHarbor,Ind. I-2

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Plates, Sheared

CONTINUED FROM PRECEDING PAGE

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
1	78x475	Johnstown,Pa. B2
1	78x480	Geneva,Utah G1
1	78x720	Coatesville,Pa. L7
1	78x720	Gary,Ind. U5
1	78x720	Munhall,Pa. U5
1	78x840	SparrowsPt.,Md. B2
1	80x324	IndianaHarbor,Ind. I-2
1	84x300	IndianaHarbor,Ind. I-2
1	84x450	Johnstown,Pa. B2
1	84x460	Geneva,Utah G1
1	84x720	Coatesville,Pa. L7
1	84x720	Gary,Ind. U5
1	84x720	Munhall,Pa. U5
1	84x840	SparrowsPt.,Md. B2
1	87x720	Munhall,Pa. U5
1	88x300	IndianaHarbor,Ind. I-2
1	90x350	Geneva,Utah G1
1	90x425	Johnstown,Pa. B2
1	90x720	Coatesville,Pa. L7
1	90x720	Gary,Ind. U5
1	90x720	Munhall,Pa. U5
1	90x840	SparrowsPt.,Md. B2
1	92x240	IndianaHarbor,Ind. I-2
1	94x240	IndianaHarbor,Ind. I-2
1	96x240	IndianaHarbor,Ind. I-2
1	96x315	Fontana,Calif. K1
1	96x340	Geneva,Utah G1
1	96x420	Johnstown,Pa. B2
1	96x720	Coatesville,Pa. L7
1	96x720	Gary,Ind. U5
1	96x720	MunhaH,Pa. U5
1	96x840	SparrowsPt.,Md. B2
1	102x320	Geneva,Utah G1
1	102x375	Johnstown,Pa. B2
1	102x720	Coatesville,Pa. L7
1	102x720	Gary,Ind. U5
1	102x720	Munhall,Pa. U5
1	102x840	SparrowsPt.,Md. B2
1	104x325	Johnstown,Pa. B2
1	108x300	Geneva,Utah G1
1	108x325	Johnstown,Pa. B2
1	108x720	Coatesville,Pa. L7
1	108x720	Gary,Ind. U5
1	108x720	Munhall,Pa. U5
1	108x720	SparrowsPt.,Md. B2
1	110x320	Johnstown,Pa. B2
1	114x285	Geneva,Utah G1
1	114x300	Johnstown,Pa. B2
1	114x540	Coatesville,Pa. L7
1	114x660	Gary,Ind. U5
1	114x720	Munhall,Pa. U5
1	114x720	SparrowsPt.,Md. B2
1	115x256	Harrisburg,Pa. C5
1	120x260	Geneva,Utah G1
1	120x280	Johnstown,Pa. B2
1	120x540	Coatesville,Pa. L7
1	120x600	Gary,Ind. U5
1	120x720	Munhall,Pa. U5
1	120x720	SparrowsPt.,Md. B2
1	126x540	Coatesville,Pa. L7
1	126x540	Gary,Ind. U5
1	126x720	Munhall,Pa. U5
1	126x720	SparrowsPt.,Md. B2
1	132x520	Gary,Ind. U5
1	132x540	Coatesville,Pa. L7
1	132x660	Munhall,Pa. U5
1	132x720	SparrowsPt.,Md. B2
1	138x480	Gary,Ind. U5
1	138x540	Coatesville,Pa. L7
1	138x600	Munhall,Pa. U5
1	138x720	SparrowsPt.,Md. B2
1	144x420	Gary,Ind. U5
1	144x540	Coatesville,Pa. L7
1	144x560	Munhall,Pa. U5
1	144x650	SparrowsPt.,Md. B2
1	146x480	SparrowsPt.,Md. B2
1	148x360	Gary,Ind. U5
1	150x360	SparrowsPt.,Md. B2
1	150x540	Coatesville,Pa. L7
1	150x540	Munhall,Pa. U5
1	156x540	Coatesville,Pa. L7
1	162x540	Coatesville,Pa. L7
1	168x540	Coatesville,Pa. L7
1	174x500	Coatesville,Pa. L7
1	180x475	Coatesville,Pa. L7
1	186x400	Coatesville,Pa. L7
1	192x300	Coatesville,Pa. L7
1	195x250	Coatesville,Pa. L7
1 and over	72x240	Economy,Pa. B14
1⅛	24x360	Coatesville,Pa. L7
1⅛	24x450	Munhall,Pa. U5
1⅛	24x600	SparrowsPt.,Md. B2
1⅛	30x465	Munhall,Pa. U5
1⅛	30x540	IndianaHarbor,Ind. I-2
1⅛	30x600	SparrowsPt.,Md. B2
1⅛	36x420	Coatesville,Pa. L7
1⅛	36x475	Johnstown,Pa. B2
1⅛	36x480	Geneva,Utah G1
1⅛	36x520	Munhall,Pa. U5
1⅛	36x540	IndianaHarbor,Ind. I-2
1⅛	36x600	SparrowsPt.,Md. B2
1⅛	42x400	IndianaHarbor,Ind. I-2
1⅛	42x520	Munhall,Pa. U5
1⅛	42x530	Johnstown,Pa. B2
1⅛	42x650	SparrowsPt.,Md. B2
1⅛	48x360	IndianaHarbor,Ind. I-2
1⅛	48x600	Munhall,Pa. U5
1⅛	48x720	Gary,Ind. U5
1⅛	48x800	Coatesville,Pa. L7
1⅛	48 1/16x525	Johnstown,Pa. B2
1⅛	48 1/16x840	SparrowsPt.,Md. B2
1⅛	54x360	IndianaHarbor,Ind. I-2
1⅛	54x520	Johnstown,Pa. B2
1⅛	54x660	Munhall,Pa. U5
1⅛	54x720	Gary,Ind. U5
1⅛	54x800	Coatesville,Pa. L7
1⅛	54x840	SparrowsPt.,Md. B2
1⅛	60x360	IndianaHarbor,Ind. I-2
1⅛	60x515	Johnstown,Pa. B2
1⅛	60x720	Gary,Ind. U5
1⅛	60x720	Munhall,Pa. U5
1⅛	60x800	Coatesville,Pa. L7
1⅛	60x840	SparrowsPt.,Md. B2
1⅛	66x300	IndianaHarbor,Ind. I-2
1⅛	66x500	Johnstown,Pa. B2
1⅛	66x720	Coatesville,Pa. L7
1⅛	66x720	Gary,Ind. U5
1⅛	66x720	Munhall,Pa. U5
1⅛	66x840	SparrowsPt.,Md. B2
1⅛	72x300	IndianaHarbor,Ind. I-2
1⅛	72x475	Johnstown,Pa. B2
1⅛	72x480	Geneva,Utah G1
1⅛	72x720	Coatesville,Pa. L7
1⅛	72x720	Gary,Ind. U5
1⅛	72x720	Munhall,Pa. U5
1⅛	72x840	SparrowsPt.,Md. B2
1⅛	76x240	IndianaHarbor,Ind. I-2
1⅛	78x450	Johnstown,Pa. B2
1⅛	78x460	Geneva,Utah G1
1⅛	78x720	Coatesville,Pa. L7
1⅛	78x720	Gary,Ind. U5
1⅛	78x720	Munhall,Pa. U5
1⅛	78x840	SparrowsPt.,Md. B2
1⅛	80x240	IndianaHarbor,Ind. I-2
1⅛	84x240	IndianaHarbor,Ind. I-2
1⅛	84x390	Geneva,Utah G1
1⅛	84x425	Johnstown,Pa. B2
1⅛	84x720	Coatesville,Pa. L7
1⅛	84x720	Gary,Ind. U5
1⅛	84x720	Munhall,Pa. U5
1⅛	84x840	SparrowsPt.,Md. B2
1⅛	87x720	Munhall,Pa. U5
1⅛	88x240	IndianaHarbor,Ind. I-2
1⅛	90x320	Geneva,Utah G1
1⅛	90x400	Johnstown,Pa. B2
1⅛	90x720	Coatesville,Pa. L7
1⅛	90x720	Gary,Ind. U5
1⅛	90x720	Munhall,Pa. U5
1⅛	90x840	SparrowsPt.,Md. B2
1⅛	92x240	IndianaHarbor,Ind. I-2
1⅛	94x240	IndianaHarbor,Ind. I-2
1⅛	96x240	IndianaHarbor,Ind. I-2
1⅛	96x273	Fontana,Calif. K1
1⅛	96x300	Geneva,Utah G1
1⅛	96x375	Johnstown,Pa. B2
1⅛	96x720	Coatesville,Pa. L7
1⅛	96x720	Gary,Ind. U5
1⅛	96x720	Munhall,Pa. U5
1⅛	96x720	SparrowsPt.,Md. B2
1⅛	102x285	Geneva,Utah G1
1⅛	102x350	Johnstown,Pa. B2
1⅛	102x720	Coatesville,Pa. L7
1⅛	102x720	Gary,Ind. U5
1⅛	102x720	Munhall,Pa. U5
1⅛	102x720	SparrowsPt.,Md. B2
1⅛	104x325	Johnstown,Pa. B2
1⅛	108x270	Geneva,Utah G1
1⅛	108x325	Johnstown,Pa. B2
1⅛	108x720	Coatesville,Pa. L7
1⅛	108x720	Gary,Ind. U5
1⅛	108x720	Munhall,Pa. U5
1⅛	108x720	SparrowsPt.,Md. B2
1⅛	110x300	Johnstown,Pa. B2
1⅛	114x290	Johnstown,Pa. B2
1⅛	114x540	Coatesville,Pa. L7
1⅛	114x660	Gary,Ind. U5
1⅛	114x720	Munhall,Pa. U5
1⅛	114x720	SparrowsPt.,Md. B2
1⅛	120x250	Johnstown,Pa. B2
1⅛	120x540	Coatesville,Pa. L7
1⅛	120x600	Gary,Ind. U5
1⅛	120x720	Munhall,Pa. U5
1⅛	120x720	SparrowsPt.,Md. B2
1⅛	126x540	Coatesville,Pa. L7
1⅛	126x540	Gary,Ind. U5
1⅛	126x700	SparrowsPt.,Md. B2
1⅛	126x720	Munhall,Pa. U5
1⅛	132x520	Gary,Ind. U5
1⅛	132x540	Coatesville,Pa. L7
1⅛	132x660	Munhall,Pa. U5
1⅛	132x665	SparrowsPt.,Md. B2
1⅛	138x480	Gary,Ind. U5
1⅛	138x540	Coatesville,Pa. L7
1⅛	138x600	Munhall,Pa. U5
1⅛	138x640	SparrowsPt.,Md. B2
1⅛	144x420	Gary,Ind. U5
1⅛	144x540	Coatesville,Pa. L7
1⅛	144x560	Munhall,Pa. U5
1⅛	144x610	SparrowsPt.,Md. B2
1⅛	146x480	SparrowsPt.,Md. B2
1⅛	148x360	Gary,Ind. U5
1⅛	150x360	SparrowsPt.,Md. B2
1⅛	150x540	Coatesville,Pa. L7
1⅛	150x540	Munhall,Pa. U5
1⅛	156x540	Coatesville,Pa. L7
1⅛	162x540	Coatesville,Pa. L7
1⅛	168x540	Coatesville,Pa. L7
1⅛	174x500	Coatesville,Pa. L7
1⅛	180x475	Coatesville,Pa. L7
1⅛	186x400	Coatesville,Pa. L7
1⅛	192x300	Coatesville,Pa. L7
1⅛	195x250	Coatesville,Pa. L7
1¼	24x360	Coatesville,Pa. L7
1¼	24x480	Munhall,Pa. U5
1¼	24x600	SparrowsPoint,Md. B2
1¼	30x450	Munhall,Pa. U5
1¼	30x600	SparrowsPoint,Md. B2
1¼	32x480	IndianaHarbor,Ind. I-2
1¼	36x420	Coatesville,Pa. L7
1¼	36x450	Johnstown,Pa. B2
1¼	36x480	Geneva,Utah G1
1¼	36x480	IndianaHarbor,Ind. I-2
1¼	36x500	Munhall,Pa. U5
1¼	36x600	SparrowsPoint,Md. B2
1¼	40x480	IndianaHarbor,Ind. I-2
1¼	42x460	Johnstown,Pa. B2
1¼	42x520	Munhall,Pa. U5
1¼	42x600	SparrowsPoint,Md. B2
1¼	44x480	IndianaHarbor,Ind. I-2
1¼	48x450	IndianaHarbor,Ind. I-2
1¼	48x600	Munhall,Pa. U5
1¼	48x720	Gary,Ind. U5
1¼	48x800	Coatesville,Pa. L7
1¼	48 1/16x475	Johnstown,Pa. B2
1¼	48 1/16x840	SparrowsPt.,Md. B2
1¼	52x414	IndianaHarbor,Ind. I-2
1¼	54x500	Johnstown,Pa. B2
1¼	54x660	Munhall,Pa. U5
1¼	54x720	Gary,Ind. U5
1¼	54x800	Coatesville,Pa. L7
1¼	54x840	SparrowsPoint,Md. B2
1¼	56x384	IndianaHarbor,Ind. I-2
1¼	60x360	IndianaHarbor,Ind. I-2
1¼	60x490	Johnstown,Pa. B2
1¼	60x720	Coatesville,Pa. L7
1¼	60x720	Gary,Ind. U5
1¼	60x720	Munhall,Pa. U5
1¼	60x840	SparrowsPoint,Md. B2
1¼	64x336	IndianaHarbor,Ind. I-2
1¼	66x475	Johnstown,Pa. B2
1¼	66x480	Geneva,Utah G1
1¼	66x720	Coatesville,Pa. L7
1¼	66x720	Gary,Ind. U5
1¼	66x720	Munhall,Pa. U5
1¼	66x840	SparrowsPoint,Md. B2
1¼	68x318	IndianaHarbor,Ind. I-2
1¼	72x300	IndianaHarbor,Ind. I-2
1¼	72x450	Johnstown,Pa. B2
1¼	72x470	Geneva,Utah G1
1¼	72x720	Coatesville,Pa. L7
1¼	72x720	Gary,Ind. U5
1¼	72x720	Munhall,Pa. U5
1¼	72x840	SparrowsPoint,Md. B2
1¼	76x284	IndianaHarbor,Ind. I-2
1¼	78x410	Geneva,Utah G1
1¼	78x425	Johnstown,Pa. B2
1¼	78x720	Coatesville,Pa. L7
1¼	78x720	Gary,Ind. U5
1¼	78x720	Munhall,Pa. U5
1¼	78x840	SparrowsPoint,Md. B2
1¼	80x270	IndianaHarbor,Ind. I-2
1¼	84x258	IndianaHarbor,Ind. I-2
1¼	84x320	Geneva,Utah G1
1¼	84x400	Johnstown,Pa. B2
1¼	84x720	Coatesville,Pa. L7
1¼	84x720	Gary,Ind. U5
1¼	84x720	Munhall,Pa. U5
1¼	84x720	SparrowsPoint,Md. B2
1¼	87x720	Munhall,Pa. U5
1¼	88x244	IndianaHarbor,Ind. I-2
1¼	90x268	Fontana,Calif. K1
1¼	90x290	Geneva,Utah G1
1¼	90x380	Johnstown,Pa. B2
1¼	90x720	Coatesville,Pa. L7
1¼	90x720	Gary,Ind. U5
1¼	90x720	Munhall,Pa. U5
1¼	90x720	SparrowsPoint,Md. B2
1¼	92x225	IndianaHarbor,Ind. I-2
1¼	94x220	IndianaHarbor,Ind. I-2
1¼	96x270	Geneva,Utah G1
1¼	96x360	Johnstown,Pa. B2
1¼	96x720	Coatesville,Pa. L7
1¼	96x720	Gary,Ind. U5
1¼	96x720	Munhall,Pa. U5
1¼	96x720	SparrowsPoint,Md. B2
1¼	102x255	Geneva,Utah G1
1¼	102x325	Johnstown,Pa. B2
1¼	102x720	Coatesville,Pa. L7
1¼	102x720	Gary,Ind. U5
1¼	102x720	Munhall,Pa. U5
1¼	102x720	SparrowsPt.,Md. B2
1¼	104x300	Johnstown,Pa. B2
1¼	108x240	Geneva,Utah G1
1¼	108x300	Johnstown,Pa. B2
1¼	108x720	Coatesville,Pa. L7
1¼	108x720	Gary,Ind. U5
1¼	108x720	Munhall,Pa. U5
1¼	108x720	SparrowsPt.,Md. B2
1¼	110x275	Johnstown,Pa. B2

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Plates, Sheared

CONTINUED FROM PRECEDING PAGE

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
1¼	114x270	Johnstown,Pa. B2
1¼	114x540	Coatesville,Pa. L7
1¼	114x660	Gary,Ind. U5
1¼	114x720	Munhall,Pa. U5
1¼	114x720	SparrowsPt.,Md. B2
1¼	120x260	Johnstown,Pa. B2
1¼	120x540	Coatesville,Pa. L7
1¼	120x600	Gary,Ind. U5
1¼	120x660	SparrowsPt.,Md. B2
1¼	120x720	Munhall,Pa. U5
1¼	126x540	Coatesville,Pa. L7
1¼	126x540	Gary,Ind. U5
1¼	126x625	SparrowsPt.,Md. B2
1¼	126x720	Munhall,Pa. U5
1¼	132x520	Gary,Ind. U5
1¼	132x540	Coatesville,Pa. L7
1¼	132x600	SparrowsPt.,Md. B2
1¼	132x660	Munhall,Pa. U5
1¼	138x480	Gary,Ind. U5
1¼	138x540	Coatesville,Pa. L7
1¼	138x575	SparrowsPt.,Md. B2
1¼	138x600	Munhall,Pa. U5
1¼	144x420	Gary,Ind. U5
1¼	144x540	Coatesville,Pa. L7
1¼	144x550	SparrowsPt.,Md. B2
1¼	144x560	Munhall,Pa. U5
1¼	146x480	SparrowsPt.,Md. B2
1¼	148x360	Gary,Ind. U5
1¼	150x360	SparrowsPt.,Md. B2
1¼	150x540	Coatesville,Pa. L7
1¼	150x540	Munhall,Pa. U5
1¼	156x540	Coatesville,Pa. L7
1¼	162x540	Coatesville,Pa. L7
1¼	168x540	Coatesville,Pa. L7
1¼	174x500	Coatesville,Pa. L7
1¼	180x475	Coatesville,Pa. L7
1¼	186x400	Coatesville,Pa. L7
1¼	192x300	Coatesville,Pa. L7
1¼	195x250	Coatesville,Pa. L7
1⅜	24x360	Coatesville,Pa. L7
1⅜	36x420	Coatesville,Pa. L7
1⅜	48x620	Coatesville,Pa. L7
1⅜	54x720	Coatesville,Pa. L7
1⅜	60x720	Coatesville,Pa. L7
1⅜	66x720	Coatesville,Pa. L7
1⅜	72x720	Coatesville,Pa. L7
1⅜	78x720	Coatesville,Pa. L7
1⅜	84x720	Coatesville,Pa. L7
1⅜	90x244	Fontana,Calif. K1
1⅜	90x720	Coatesville,Pa. L7
1⅜	96x720	Coatesville,Pa. L7
1⅜	102x720	Coatesville,Pa. L7
1⅜	108x720	Coatesville,Pa. L7
1⅜	114x540	Coatesville,Pa. L7
1⅜	120x540	Coatesville,Pa. L7
1⅜	126x540	Coatesville,Pa. L7
1⅜	132x540	Coatesville,Pa. L7
1⅜	138x540	Coatesville,Pa. L7
1⅜	144x540	Coatesville,Pa. L7
1⅜	150x540	Coatesville,Pa. L7
1⅜	156x540	Coatesville,Pa. L7
1⅜	162x540	Coatesville,Pa. L7
1⅜	168x540	Coatesville,Pa. L7
1⅜	174x500	Coatesville,Pa. L7
1⅜	180x475	Coatesville,Pa. L7
1⅜	186x400	Coatesville,Pa. L7
1⅜	192x300	Coatesville,Pa. L7
1⅜	195x250	Coatesville,Pa. L7
1½	24x360	Coatesville,Pa. L7
1½	24x400	Munhall,Pa. U5
1½	24x600	SparrowsPt.,Md. B2
1½	30x420	Munhall,Pa. U5
1½	30x600	SparrowsPt.,Md. B2
1½	32x480	IndianaHarbor,Ind. I-2
1½	36x400	Johnstown,Pa. B2
1½	36x420	Coatesville,Pa. L7
1½	36x480	Geneva,Utah G1
1½	36x480	IndianaHarbor,Ind. I-2
1½	36x500	Munhall,Pa. U5
1½	36x600	SparrowsPoint,Md. B2
1½	40x448	IndianaHarbor,Ind. I-2
1½	42x425	Johnstown,Pa. B2
1½	42x480	Geneva,Utah G1
1½	42x520	Munhall,Pa. U5
1½	42x600	SparrowsPoint,Md. B2
1½	44x408	IndianaHarbor,Ind. I-2
1½	48x376	IndianaHarbor,Ind. I-2
1½	48x430	Geneva,Utah G1
1½	48x600	Munhall,Pa. U5
1½	48x610	Coatesville,Pa. L7
1½	48x720	Gary,Ind. U5
1½	48-½x450	Johnstown,Pa. B2
1½	48-½x840	SparrowsPt.,Md. B2
1½	52x346	IndianaHarbor,Ind. I-2
1½	54x475	Johnstown,Pa. B2
1½	54x480	Geneva,Utah G1
1½	54x660	Munhall,Pa. U5
1½	54x720	Coatesville,Pa. L7
1½	54x720	Gary,Ind. U5
1½	54x720	SparrowsPoint,Md. B2
1½	56x320	IndianaHarbor,Ind. I-2
1½	60x300	IndianaHarbor,Ind. I-2
1½	60x450	Johnstown,Pa. B2
1½	60x480	Geneva,Utah G1
1½	60x720	Coatesville,Pa. L7
1½	60x720	Gary,Ind. U5
1½	60x720	Munhall,Pa. U5
1½	60x720	SparrowsPoint,Md. B2
1½	64x282	IndianaHarbor,Ind. I-2
1½	66x425	Johnstown,Pa. B2
1½	66x450	Geneva,Utah G1
1½	66x720	Coatesville,Pa. L7
1½	66x720	Gary,Ind. U5
1½	66x720	Munhall,Pa. U5
1½	66x720	SparrowsPoint,Md. B2
1½	68x264	IndianaHarbor,Ind. I-2
1½	72x250	IndianaHarbor,Ind. I-2
1½	72x300	Geneva,Utah G1
1½	72x400	Johnstown,Pa. B2
1½	72x720	Coatesville,Pa. L7
1½	72x720	Gary,Ind. U5
1½	72x720	Munhall,Pa. U5
1½	72x720	SparrowsPoint,Md. B2
1½	76x225	IndianaHarbor,Ind. I-2
1½	78x340	Geneva,Utah G1
1½	78x375	Johnstown,Pa. B2
1½	78x720	Coatesville,Pa. L7
1½	78x720	Gary,Ind. U5
1½	78x720	Munhall,Pa. U5
1½	78x720	SparrowsPoint,Md. B2
1½	80x224	IndianaHarbor,Ind. I-2
1½	84x214	IndianaHarbor,Ind. I-2
1½	84x250	Geneva,Utah G1
1½	84x350	Johnstown,Pa. B2
1½	84x720	Coatesville,Pa. L7
1½	84x720	Gary,Ind. U5
1½	84x720	Munhall,Pa. U5
1½	84x720	SparrowsPoint,Md. B2
1½	87x720	Munhall,Pa. U5
1½	88x204	IndianaHarbor,Ind. I-2
1½	90x210	Geneva,Utah G1
1½	90x224	Fontana,Calif. K1
1½	90x325	Johnstown,Pa. B2
1½	90x720	Coatesville,Pa. L7
1½	90x720	Gary,Ind. U5
1½	90x720	Munhall,Pa. U5
1½	90x720	SparrowsPoint,Md. B2
1½	92x196	IndianaHarbor,Ind. I-2
1½	94x192	IndianaHarbor,Ind. I-2
1½	96x210	Geneva,Utah G1
1½	96x300	Johnstown,Pa. B2
1½	96x685	SparrowsPoint,Md. B2
1½	96x720	Coatesville,Pa. L7
1½	96x720	Gary,Ind. U5
1½	96x720	Munhall,Pa. U5
1½	102x200	Geneva,Utah G1
1½	102x275	Johnstown,Pa. B2
1½	102x645	SparrowsPt.,Md. B2
1½	102x720	Coatesville,Pa. L7
1½	102x720	Gary,Ind. U5
1½	102x720	Munhall,Pa. U5
1½	104x275	Johnstown,Pa. B2
1½	108x200	Geneva,Utah G1
1½	108x275	Johnstown,Pa. B2
1½	108x610	SparrowsPt.,Md. B2
1½	108x660	Gary,Ind. U5
1½	108x720	Coatesville,Pa. L7
1½	108x720	Munhall,Pa. U5
1½	110x250	Johnstown,Pa. B2
1½	114x240	Johnstown,Pa. B2
1½	114x540	Coatesville,Pa. L7
1½	114x580	SparrowsPt.,Md. B2
1½	114x630	Gary,Ind. U5
1½	114x720	Munhall,Pa. U5
1½	115x168	Harrisburg,Pa. C5
1½	120x220	Johnstown,Pa. B2
1½	120x540	Coatesville,Pa. L7
1½	120x550	SparrowsPt.,Md. B2
1½	120x600	Gary,Ind. U5
1½	120x720	Munhall,Pa. U5
1½	126x525	SparrowsPt.,Md. B2
1½	126x540	Coatesville,Pa. L7
1½	126x540	Gary,Ind. U5
1½	126x720	Munhall,Pa. U5
1½	132x500	Gary,Ind. U5
1½	132x500	SparrowsPt.,Md. B2
1½	132x540	Coatesville,Pa. L7
1½	132x660	Munhall,Pa. U5
1½	138x460	Gary,Ind. U5
1½	138x477	SparrowsPt.,Md. B2
1½	138x540	Coatesville,Pa. L7
1½	138x600	Munhall,Pa. U5
1½	144x420	Gary,Ind. U5
1½	144x460	SparrowsPt.,Md. B2
1½	144x540	Coatesville,Pa. L7
1½	144x560	Munhall,Pa. U5
1½	146x450	SparrowsPt.,Md. B2
1½	148x320	Gary,Ind. U5
1½	150x360	SparrowsPt.,Md. B2
1½	150x540	Coatesville,Pa. L7
1½	150x540	Munhall,Pa. U5
1½	156x540	Coatesville,Pa. L7
1½	162x540	Coatesville,Pa. L7
1½	168x540	Coatesville,Pa. L7
1½	174x500	Coatesville,Pa. L7
1½	180x475	Coatesville,Pa. L7
1½	186x400	Coatesville,Pa. L7
1½	192x300	Coatesville,Pa. L7
1½	195x250	Coatesville,Pa. L7
1⅝	49x370	Geneva,Utah G1
1⅝	54x445	Geneva,Utah G1
1⅝	60x425	Geneva,Utah G1
1⅝	66x390	Geneva,Utah G1
1⅝	72x360	Geneva,Utah G1
1⅝	78x330	Geneva,Utah G1
1⅝	84x240	Geneva,Utah G1
1⅝	90x215	Geneva,Utah G1
1⅝	96x200	Geneva,Utah G1
1¾	24x360	Coatesville,Pa. L7
1¾	24x400	Munhall,Pa. U5
1¾	24x480	SparrowsPoint,Md. B2
1¾	30x420	Munhall,Pa. U5
1¾	30x480	SparrowsPoint,Md. B2
1¾	32x480	IndianaHarbor,Ind. I-2
1¾	36x360	Johnstown,Pa. B2
1¾	36x420	Coatesville,Pa. L7
1¾	36x420	IndianaHarbor,Ind. I-2
1¾	36x480	SparrowsPoint,Md. B2
1¾	36x500	Munhall,Pa. U5
1¾	40x384	IndianaHarbor,Ind. I-2
1¾	42x425	Johnstown,Pa. B2
1¾	42x520	Munhall,Pa. U5
1¾	42x600	SparrowsPoint,Md. B2
1¾	44x351	IndianaHarbor,Ind. I-2
1¾	48x320	IndianaHarbor,Ind. I-2
1¾	48x600	Coatesville,Pa. L7
1¾	48x600	Munhall,Pa. U5
1¾	48x720	Gary,Ind. U5
1¾	48-⅛x425	Johnstown,Pa. B2
1¾	48-⅛x720	SparrowsPt.,Md. B2
1¾	49x345	Geneva,Utah G1
1¾	52x296	IndianaHarbor,Ind. I-2
1¾	54x410	Geneva,Utah G1
1¾	54x425	Johnstown,Pa. B2
1¾	54x660	Munhall,Pa. U5
1¾	54x660	SparrowsPoint,Md. B2
1¾	54x720	Coatesville,Pa. L7
1¾	54x720	Gary,Ind. U5
1¾	56x276	IndianaHarbor,Ind. I-2
1¾	60x252	IndianaHarbor,Ind. I-2
1¾	60x385	Geneva,Utah G1
1¾	60x400	Johnstown,Pa. B2
1¾	60x720	Coatesville,Pa. L7
1¾	60x720	Gary,Ind. U5
1¾	60x720	Munhall,Pa. U5
1¾	60x720	SparrowsPoint,Md. B2
1¾	64x240	IndianaHarbor,Ind. I-2
1¾	66x360	Geneva,Utah G1
1¾	66x375	Johnstown,Pa. B2
1¾	66x720	Coatesville,Pa. L7
1¾	66x720	Gary,Ind. U5
1¾	66x720	Munhall,Pa. U5
1¾	66x720	SparrowsPoint,Md. B2
1¾	68x228	IndianaHarbor,Ind. I-2
1¾	72x214	IndianaHarbor,Ind. I-2
1¾	72x335	Geneva,Utah G1
1¾	72x350	Johnstown,Pa. B2
1¾	72x720	Coatesville,Pa. L7
1¾	72x720	Gary,Ind. U5
1¾	72x720	Munhall,Pa. U5
1¾	72x720	SparrowsPoint,Md. B2
1¾	76x204	IndianaHarbor,Ind. I-2
1¾	78x305	Geneva,Utah G1
1¾	78x325	Johnstown,Pa. B2
1¾	78x720	Coatesville,Pa. L7
1¾	78x720	Gary,Ind. U5
1¾	78x720	Munhall,Pa. U5
1¾	78x720	SparrowsPoint,Md. B2
1¾	80x192	IndianaHarbor,Ind. I-2
1¾	84x184	IndianaHarbor,Ind. I-2
1¾	84x205	Fontana,Calif. K1
1¾	84x220	Geneva,Utah G1
1¾	84x300	Johnstown,Pa. B2
1¾	84x675	SparrowsPoint,Md. B2
1¾	84x720	Coatesville,Pa. L7
1¾	84x720	Gary,Ind. U5
1¾	84x720	Munhall,Pa. U5
1¾	87x600	Munhall,Pa. U5
1¾	88x176	IndianaHarbor,Ind. I-2
1¾	90x200	Geneva,Utah G1
1¾	90x275	Johnstown,Pa. B2
1¾	90x630	SparrowsPoint,Md. B2
1¾	90x720	Coatesville,Pa. L7
1¾	90x720	Gary,Ind. U5
1¾	90x720	Munhall,Pa. U5
1¾	92x168	IndianaHarbor,Ind. I-2
1¾	94x164	IndianaHarbor,Ind. I-2
1¾	96x265	Johnstown,Pa. B2
1¾	96x590	SparrowsPoint,Md. B2
1¾	96x680	Gary,Ind. U5
1¾	96x720	Coatesville,Pa. L7
1¾	96x720	Munhall,Pa. U5
1¾	102x250	Johnstown,Pa. B2
1¾	102x555	SparrowsPt.,Md. B2
1¾	102x640	Gary,Ind. U5
1¾	102x720	Coatesville,Pa. L7
1¾	102x720	Munhall,Pa. U5
1¾	104x225	Johnstown,Pa. B2
1¾	108x225	Johnstown,Pa. B2
1¾	108x525	SparrowsPt.,Md. B2
1¾	108x600	Gary,Ind. U5
1¾	108x720	Coatesville,Pa. L7
1¾	108x720	Munhall,Pa. U5
1¾	110x200	Johnstown,Pa. B2
1¾	114x190	Johnstown,Pa. B2
1¾	114x495	SparrowsPt.,Md. B2
1¾	114x540	Coatesville,Pa. L7
1¾	114x575	Gary,Ind. U5

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Plates, Sheared

CONTINUED FROM PRECEDING PAGE

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
1/2	114x720	Munhall,Pa. U5
1/2	120x170	Johnstown,Pa. B2
1/2	120x470	SparrowsPt.,Md. B2
1/2	120x520	Gary,Ind. U5
1/2	120x540	Coatesville,Pa. L7
1/2	120x660	Munhall,Pa. U5
1/2	126x450	SparrowsPt.,Md. B2
1/2	126x480	Gary,Ind. U5
1/2	126x540	Coatesville,Pa. L7
1/2	126x620	Munhall,Pa. U5
1/2	132x430	SparrowsPt.,Md. B2
1/2	132x440	Gary,Ind. U5
1/2	132x540	Coatesville,Pa. L7
1/2	132x600	Munhall,Pa. U5
1/2	138x410	SparrowsPt.,Md. B2
1/2	138x420	Gary,Ind. U5
1/2	138x540	Coatesville,Pa. L7
1/2	138x580	Munhall,Pa. U5
1/2	144x390	SparrowsPt.,Md. B2
1/2	144x400	Gary,Ind. U5
1/2	144x540	Coatesville,Pa. L7
1/2	144x560	Munhall,Pa. U5
1/2	146x380	SparrowsPt.,Md. B2
1/2	148x280	Gary,Ind. U5
1/2	150x360	SparrowsPt.,Md. B2
1/2	150x540	Coatesville,Pa. L7
1/2	150x540	Munhall,Pa. U5
1/2	156x540	Coatesville,Pa. L7
1/2	162x540	Coatesville,Pa. L7
1/2	168x540	Coatesville,Pa. L7
1/2	174x500	Coatesville,Pa. L7
1/2	180x475	Coatesville,Pa. L7
1/2	186x400	Coatesville,Pa. L7
1/2	192x300	Coatesville,Pa. L7
1/2	195x250	Coatesville,Pa. L7
9/16	49x320	Geneva,Utah G1
9/16	54x380	Geneva,Utah G1
9/16	60x360	Geneva,Utah G1
9/16	66x335	Geneva,Utah G1
9/16	72x310	Geneva,Utah G1
9/16	78x285	Geneva,Utah G1
9/16	84x200	Geneva,Utah G1
5/8	24x360	Coatesville,Pa. L7
5/8	24x400	Munhall,Pa. U5
5/8	24x420	SparrowsPoint,Md. B2
5/8	30x420	Munhall,Pa. U5
5/8	30x420	SparrowsPoint,Md. B2
5/8	32x420	IndianaHarbor,Ind. I-2
5/8	36x300	Johnstown,Pa. B2
5/8	36x372	IndianaHarbor,Ind. I-2
5/8	36x420	Coatesville,Pa. L7
5/8	36x420	SparrowsPoint,Md. B2
5/8	36x500	Munhall,Pa. U5
5/8	40x336	IndianaHarbor,Ind. I-2
5/8	42x260	Johnstown,Pa. B2
5/8	42x520	Munhall,Pa. U5
5/8	42x600	SparrowsPoint,Md. B2
5/8	44x306	IndianaHarbor,Ind. I-2
5/8	48x280	IndianaHarbor,Ind. I-2
5/8	48x600	Coatesville,Pa. L7
5/8	48x600	Munhall,Pa. U5
5/8	48x720	Gary,Ind. U5
5/8	48 1/8x375	Johnstown,Pa. B2
5/8	48 1/8x640	SparrowsPt.,Md. B2
5/8	49x300	Geneva,Utah G1
5/8	52x260	IndianaHarbor,Ind. I-2
5/8	54x355	Geneva,Utah G1
5/8	54x375	Johnstown,Pa. B2
5/8	54x570	SparrowsPoint,Md. B2
5/8	54x660	Munhall,Pa. U5
5/8	54x720	Coatesville,Pa. L7
5/8	54x720	Gary,Ind. U5
5/8	56x240	IndianaHarbor,Ind. I-2
5/8	60x224	IndianaHarbor,Ind. I-2
5/8	60x335	Geneva,Utah G1
5/8	60x350	Johnstown,Pa. B2
5/8	60x700	SparrowsPoint,Md. B2
5/8	60x720	Coatesville,Pa. L7
5/8	60x720	Gary,Ind. U5
5/8	60x720	Munhall,Pa. U5
5/8	64x211	IndianaHarbor,Ind. I-2
5/8	66x310	Geneva,Utah G1
5/8	66x325	Johnstown,Pa. B2
5/8	66x720	Coatesville,Pa. L7
5/8	66x720	Gary,Ind. U5
5/8	66x720	Munhall,Pa. U5
5/8	66x720	SparrowsPoint,Md. B2
5/8	68x198	IndianaHarbor,Ind. I-2
5/8	72x188	IndianaHarbor,Ind. I-2
5/8	72x290	Geneva,Utah G1
5/8	72x300	Johnstown,Pa. B2
5/8	72x680	SparrowsPoint,Md. B2
5/8	72x720	Coatesville,Pa. L7
5/8	72x720	Gary,Ind. U5
5/8	72x720	Munhall,Pa. U5
5/8	76x178	IndianaHarbor,Ind. I-2
5/8	78x270	Geneva,Utah G1
5/8	78x280	Johnstown,Pa. B2
5/8	78x635	SparrowsPoint,Md. B2
5/8	78x720	Coatesville,Pa. L7
5/8	78x720	Gary,Ind. U5
5/8	78x720	Munhall,Pa. U5
5/8	80x168	IndianaHarbor,Ind. I-2
5/8	84x160	IndianaHarbor,Ind. I-2
5/8	84x180	Fontana,Calif. K1
5/8	84x260	Johnstown,Pa. B2
5/8	84x590	SparrowsPoint,Md. B2
5/8	84x650	Gary,Ind. U5
5/8	84x720	Coatesville,Pa. L7
5/8	84x720	Munhall,Pa. U5
5/8	87x545	Munhall,Pa. U5
5/8	88x153	IndianaHarbor,Ind. I-2
5/8	90x250	Johnstown,Pa. B2
5/8	90x550	SparrowsPoint,Md. B2
5/8	90x640	Gary,Ind. U5
5/8	90x720	Coatesville,Pa. L7
5/8	90x720	Munhall,Pa. U5
5/8	92x147	IndianaHarbor,Ind. I-2
5/8	94x144	IndianaHarbor,Ind. I-2
5/8	96x235	Johnstown,Pa. B2
5/8	96x515	SparrowsPoint,Md. B2
5/8	96x600	Gary,Ind. U5
5/8	96x720	Coatesville,Pa. L7
5/8	96x720	Munhall,Pa. U5
5/8	102x220	Johnstown,Pa. B2
5/8	102x485	SparrowsPt.,Md. B2
5/8	102x560	Gary,Ind. U5
5/8	102x690	Munhall,Pa. U5
5/8	102x720	Coatesville,Pa. L7
5/8	104x180	Johnstown,Pa. B2
5/8	108x180	Johnstown,Pa. B2
5/8	108x460	SparrowsPt.,Md. B2
5/8	108x530	Gary,Ind. U5
5/8	108x660	Munhall,Pa. U5
5/8	108x720	Coatesville,Pa. L7
5/8	110x170	Johnstown,Pa. B2
5/8	114x160	Johnstown,Pa. B2
5/8	114x435	SparrowsPt.,Md. B2
5/8	114x500	Gary,Ind. U5
5/8	114x620	Munhall,Pa. U5
5/8	114x675	Coatesville,Pa. L7
5/8	115x128	Harrisburg,Pa. C5
5/8	120x150	Johnstown,Pa. B2
5/8	120x410	SparrowsPt.,Md. B2
5/8	120x480	Gary,Ind. U5
5/8	120x590	Munhall,Pa. U5
5/8	120x675	Coatesville,Pa. L7
5/8	126x395	SparrowsPt.,Md. B2
5/8	126x420	Gary,Ind. U5
5/8	126x560	Munhall,Pa. U5
5/8	126x650	Coatesville,Pa. L7
5/8	132x375	SparrowsPt.,Md. B2
5/8	132x400	Gary,Ind. U5
5/8	132x540	Munhall,Pa. U5
5/8	132x650	Coatesville,Pa. L7
5/8	138x360	SparrowsPt.,Md. B2
5/8	138x380	Gary,Ind. U5
5/8	138x520	Munhall,Pa. U5
5/8	138x600	Coatesville,Pa. L7
5/8	144x345	SparrowsPt.,Md. B2
5/8	144x360	Gary,Ind. U5
5/8	144x500	Munhall,Pa. U5
5/8	144x600	Coatesville,Pa. L7
5/8	146x340	SparrowsPt.,Md. B2
5/8	148x240	Gary,Ind. U5
5/8	150x330	SparrowsPt.,Md. B2
5/8	150x480	Munhall,Pa. U5
5/8	150x550	Coatesville,Pa. L7
5/8	156x550	Coatesville,Pa. L7
5/8	162x540	Coatesville,Pa. L7
5/8	168x540	Coatesville,Pa. L7
5/8	174x500	Coatesville,Pa. L7
5/8	180x480	Coatesville,Pa. L7
5/8	186x400	Coatesville,Pa. L7
5/8	192x300	Coatesville,Pa. L7
5/8	195x250	Coatesville,Pa. L7
11/16	49x285	Geneva,Utah G1
11/16	54x335	Geneva,Utah G1
11/16	60x315	Geneva,Utah G1
11/16	66x295	Geneva,Utah G1
11/16	72x275	Geneva,Utah G1
11/16	78x255	Geneva,Utah G1
11/16	24x600	Coatesville,Pa. L7
11/16	32x372	IndianaHarbor,Ind. I-2
11/16	36x330	IndianaHarbor,Ind. I-2
11/16	36x585	Coatesville,Pa. L7
11/16	40x306	IndianaHarbor,Ind. I-2
11/16	44x272	IndianaHarbor,Ind. I-2
11/16	48x249	IndianaHarbor,Ind. I-2
11/16	48x600	Coatesville,Pa. L7
11/16	48x600	Munhall,Pa. U5
11/16	49x270	Geneva,Utah G1
11/16	52x231	IndianaHarbor,Ind. I-2
11/16	54x315	Geneva,Utah G1
11/16	54x600	Munhall,Pa. U5
11/16	54x720	Coatesville,Pa. L7
11/16	56x214	IndianaHarbor,Ind. I-2
11/16	60x200	IndianaHarbor,Ind. I-2
11/16	60x300	Geneva,Utah G1
11/16	60x600	Munhall,Pa. U5
11/16	60x720	Coatesville,Pa. L7
11/16	60x730	SparrowsPoint,Md. B2
11/16	64x188	IndianaHarbor,Ind. I-2
11/16	66x280	Geneva,Utah G1
11/16	66x600	Munhall,Pa. U5
11/16	66x665	SparrowsPoint,Md. B2
11/16	66x720	Coatesville,Pa. L7
11/16	68x176	IndianaHarbor,Ind. I-2
11/16	72x166	IndianaHarbor,Ind. I-2
11/16	72x260	Geneva,Utah G1
11/16	72x600	Munhall,Pa. U5
11/16	72x610	SparrowsPoint,Md. B2
11/16	72x720	Coatesville,Pa. L7
11/16	76x158	IndianaHarbor,Ind. I-2
11/16	78x240	Geneva,Utah G1
11/16	78x665	SparrowsPoint,Md. B2
11/16	78x600	Munhall,Pa. U5
11/16	78x720	Coatesville,Pa. L7
11/16	80x150	IndianaHarbor,Ind. I-2
11/16	84x142	IndianaHarbor,Ind. I-2
11/16	84x160	Fontana,Calif. K1
11/16	84x525	SparrowsPoint,Md. B2
11/16	84x600	Munhall,Pa. U5
11/16	84x720	Coatesville,Pa. L7
11/16	88x136	IndianaHarbor,Ind. I-2
11/16	90x490	SparrowsPoint,Md. B2
11/16	90x600	Munhall,Pa. U5
11/16	90x720	Coatesville,Pa. L7
11/16	92x130	IndianaHarbor,Ind. I-2
11/16	94x128	IndianaHarbor,Ind. I-2
11/16	96x460	SparrowsPoint,Md. B2
11/16	96x600	Munhall,Pa. U5
11/16	96x720	Coatesville,Pa. L7
11/16	102x430	SparrowsPt.,Md. B2
11/16	102x660	Munhall,Pa. U5
11/16	102x720	Coatesville,Pa. L7
11/16	108x410	SparrowsPt.,Md. B2
11/16	108x537	Munhall,Pa. U5
11/16	108x720	Coatesville,Pa. L7
11/16	114x385	SparrowsPt.,Md. B2
11/16	114x510	Munhall,Pa. U5
11/16	114x675	Coatesville,Pa. L7
11/16	120x365	SparrowsPt.,Md. B2
11/16	120x483	Munhall,Pa. U5
11/16	120x675	Coatesville,Pa. L7
11/16	126x350	SparrowsPt.,Md. B2
11/16	126x460	Munhall,Pa. U5
11/16	126x650	Coatesville,Pa. L7
11/16	132x335	SparrowsPt.,Md. B2
11/16	132x439	Munhall,Pa. U5
11/16	132x650	Coatesville,Pa. L7
11/16	138x320	SparrowsPt.,Md. B2
11/16	138x420	Munhall,Pa. U5
11/16	138x600	Coatesville,Pa. L7
11/16	144x305	SparrowsPt.,Md. B2
11/16	144x402	Munhall,Pa. U5
11/16	144x600	Coatesville,Pa. L7
11/16	146x300	SparrowsPt.,Md. B2
11/16	150x550	Coatesville,Pa. L7
11/16	156x550	Coatesville,Pa. L7
11/16	162x540	Coatesville,Pa. L7
11/16	168x540	Coatesville,Pa. L7
11/16	174x500	Coatesville,Pa. L7
11/16	180x480	Coatesville,Pa. L7
11/16	186x400	Coatesville,Pa. L7
11/16	192x300	Coatesville,Pa. L7
11/16	195x225	Coatesville,Pa. L7
11/16	49x255	Geneva,Utah G1
11/16	54x300	Geneva,Utah G1
11/16	60x285	Geneva,Utah G1
11/16	66x265	Geneva,Utah G1
11/16	72x245	Geneva,Utah G1
11/16	78x225	Geneva,Utah G1
11/16	24x600	Coatesville,Pa. L7
11/16	32x336	IndianaHarbor,Ind. I-2
11/16	36x240	Johnstown,Pa. B2
11/16	36x300	IndianaHarbor,Ind. I-2
11/16	36x585	Coatesville,Pa. L7
11/16	40x270	IndianaHarbor,Ind. I-2
11/16	42x242	Johnstown,Pa. B2
11/16	44x244	IndianaHarbor,Ind. I-2
11/16	48x225	IndianaHarbor,Ind. I-2
11/16	48x600	Coatesville,Pa. L7
11/16	48x600	Munhall,Pa. U5
11/16	48x720	Gary,Ind. U5
11/16	48 1/8x312	Johnstown,Pa. B2
11/16	49x240	Geneva,Utah G1
11/16	52x207	IndianaHarbor,Ind. I-2
11/16	54x285	Geneva,Utah G1
11/16	54x312	Johnstown,Pa. B2
11/16	54x600	Munhall,Pa. U5
11/16	54x720	Coatesville,Pa. L7
11/16	54x720	Gary,Ind. U5
11/16	56x192	IndianaHarbor,Ind. I-2
11/16	60x180	IndianaHarbor,Ind. I-2
11/16	60x270	Geneva,Utah G1
11/16	60x280	Johnstown,Pa. B2
11/16	60x600	Munhall,Pa. U5
11/16	60x660	SparrowsPoint,Md. B2
11/16	60x720	Coatesville,Pa. L7
11/16	60x720	Gary,Ind. U5
11/16	64x168	IndianaHarbor,Ind. I-2
11/16	66x250	Geneva,Utah G1
11/16	66x252	Johnstown,Pa. B2
11/16	66x600	Munhall,Pa. U5
11/16	66x600	SparrowsPoint,Md. B2
11/16	66x680	Coatesville,Pa. L7
11/16	66x680	Gary,Ind. U5
11/16	68x150	IndianaHarbor,Ind. I-2
11/16	72x150	IndianaHarbor,Ind. I-2
11/16	72x230	Geneva,Utah G1
11/16	72x234	Johnstown,Pa. B2
11/16	72x550	SparrowsPoint,Md. B2
11/16	72x595	Munhall,Pa. U5
11/16	72x680	Coatesville,Pa. L7

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Plates, Sheared

CONTINUED FROM PRECEDING PAGE

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
2½	72x680	Gary,Ind. U5
2½	76x142	IndianaHarbor,Ind. I-2
2½	78x213	Johnstown,Pa. B2
2½	78x215	Geneva,Utah G1
2½	78x510	SparrowsPoint,Md. B2
2½	78x600	Gary,Ind. U5
2½	78x600	*Munhall,Pa. U5*
2½	78x720	Coatesville,Pa. L7
2½	80x135	*IndianaHarbor,Ind. I-2*
2½	84x128	IndianaHarbor,Ind. I-2
2½	84x144	Fontana,Calif. K1
2½	84x208	Johnstown,Pa. B2
2½	84x470	SparrowsPoint,Md. B2
2½	84x560	Gary,Ind. U5
2½	84x600	Munhall,Pa. U5
2½	84x720	Coatesville,Pa. L7
2½	88x122	IndianaHarbor,Ind. I-2
2½	90x189	Johnstown,Pa. B2
2½	90x410	*SparrowsPoint,Md. B2*
2½	90x520	Gary,Ind. U5
2½	90x576	Munhall,Pa. U5
2½	90x720	Coatesville,Pa. L7
2½	92x112	IndianaHarbor,Ind. I-2
2½	94x108	IndianaHarbor,Ind. I-2
2½	96x177	Johnstown,Pa. B2
2½	96x410	SparrowsPoint,Md. B2
2½	96x490	Gary,Ind. U5
2½	96x540	Munhall,Pa. U5
2½	96x720	Coatesville,Pa. L7
2½	102x167	Johnstown,Pa. B2
2½	102x390	SparrowsPt.,Md. B2
2½	102x465	Gary,Ind. U5
2½	102x508	Munhall,Pa. U5
2½	102x720	Coatesville,Pa. L7
2½	104x157	Johnstown,Pa. B2
2½	108x157	Johnstown,Pa. B2
2½	108x365	SparrowsPt.,Md. B2
2½	108x435	Gary,Ind. U5
2½	108x481	Munhall,Pa. U5
2½	108x720	Coatesville,Pa. L7
2½	110x150	Johnstown,Pa. B2
2½	114x345	SparrowsPt.,Md. B2
2½	114x410	Gary,Ind. U5
2½	114x455	Munhall,Pa. U5
2½	114x675	Coatesville,Pa. L7
2½	120x330	SparrowsPt.,Md. B2
2½	120x395	Gary,Ind. U5
2½	120x431	Munhall,Pa. U5
2½	120x675	Coatesville,Pa. L7
2½	126x315	SparrowsPt.,Md. B2
2½	126x380	Gary,Ind. U5
2½	126x412	Munhall,Pa. U5
2½	126x650	Coatesville,Pa. L7
2½	132x300	SparrowsPt.,Md. B2
2½	132x360	Gary,Ind. U5
2½	132x391	Munhall,Pa. U5
2½	132x650	Coatesville,Pa. L7
2½	138x285	SparrowsPt.,Md. B2
2½	138x335	Gary,Ind. U5
2½	138x374	Munhall,Pa. U5
2½	138x600	Coatesville,Pa. L7
2½	144x275	SparrowsPt.,Md. B2
2½	144x300	Gary,Ind. U5
2½	144x359	Munhall,Pa. U5
2½	144x600	Coatesville,Pa. L7
2½	146x270	SparrowsPt.,Md. B2
2½	150x550	Coatesville,Pa. L7
2½	156x550	Coatesville,Pa. L7
2½	162x540	Coatesville,Pa. L7
2½	168x540	Coatesville,Pa. L7
2½	174x500	Coatesville,Pa. L7
2½	180x480	Coatesville,Pa. L7
2½	186x400	Coatesville,Pa. L7
2½	192x300	Coatesville,Pa. L7
2½	195x225	Coatesville,Pa. L7
2¾	49x230	Geneva,Utah G1
2¾	54x270	Geneva,Utah G1
2¾	60x255	Geneva,Utah G1
2¾	66x235	Geneva,Utah G1
2¾	72x220	Geneva,Utah G1
2¾	78x205	Geneva,Utah G1
2¾	24x600	Coatesville,Pa. L7
2¾	32x306	IndianaHarbor,Ind. I-2
2¾	36x276	IndianaHarbor,Ind. I-2
2¾	36x585	Coatesville,Pa. L7
2¾	40x244	IndianaHarbor,Ind. I-2
2¾	44x222	IndianaHarbor,Ind. I-2
2¾	48x204	IndianaHarbor,Ind. I-2
2¾	48x600	Coatesville,Pa. L7
2¾	49x220	Geneva,Utah G1
2¾	52x189	IndianaHarbor,Ind. I-2
2¾	54x260	Geneva,Utah G1
2¾	54x720	Coatesville,Pa. L7
2¾	56x176	IndianaHarbor,Ind. I-2
2¾	60x164	IndianaHarbor,Ind. I-2
2¾	60x245	Geneva,Utah G1
2¾	60x600	SparrowsPoint,Md. B2
2¾	60x680	Coatesville,Pa. L7
2¾	64x153	IndianaHarbor,Ind. I-2
2¾	66x225	Geneva,Utah G1
2¾	66x545	SparrowsPoint,Md. B2
2¾	66x616	Coatesville,Pa. L7
2¾	68x144	IndianaHarbor,Ind. I-2
2¾	72x136	IndianaHarbor,Ind. I-2
2¾	72x210	Geneva,Utah G1
2¾	72x500	SparrowsPoint,Md. B2
2¾	72x616	Coatesville,Pa. L7
2¾	76x129	IndianaHarbor,Ind. I-2
2¾	78x141	Fontana,Calif. K1
2¾	78x460	SparrowsPoint,Md. B2
2¾	78x720	Coatesville,Pa. L7
2¾	80x122	IndianaHarbor,Ind. I-2
2¾	84x117	IndianaHarbor,Ind. I-2
2¾	84x430	SparrowsPoint,Md. B2
2¾	84x720	Coatesville,Pa. L7
2¾	88x111	IndianaHarbor,Ind. I-2
2¾	90x400	SparrowsPoint,Md. B2
2¾	90x720	Coatesville,Pa. L7
2¾	92x106	IndianaHarbor,Ind. I-2
2¾	94x104	IndianaHarbor,Ind. I-2
2¾	96x375	SparrowsPoint,Md. B2
2¾	96x720	Coatesville,Pa. L7
2¾	102x350	SparrowsPt.,Md. B2
2¾	102x720	Coatesville,Pa. L7
2¾	108x330	SparrowsPt.,Md. B2
2¾	108x720	Coatesville,Pa. L7
2¾	114x315	SparrowsPt.,Md. B2
2¾	114x675	Coatesville,Pa. L7
2¾	120x300	SparrowsPt.,Md. B2
2¾	120x675	Coatesville,Pa. L7
2¾	126x285	SparrowsPt.,Md. B2
2¾	126x650	Coatesville,Pa. L7
2¾	132x270	SparrowsPt.,Md. B2
2¾	132x650	Coatesville,Pa. L7
2¾	138x260	SparrowsPt.,Md. B2
2¾	138x600	Coatesville,Pa. L7
2¾	144x250	SparrowsPt.,Md. B2
2¾	144x600	Coatesville,Pa. L7
2¾	146x245	SparrowsPt.,Md. B2
2¾	150x550	Coatesville,Pa. L7
2¾	156x550	Coatesville,Pa. L7
2¾	162x540	Coatesville,Pa. L7
2¾	168x540	Coatesville,Pa. L7
2¾	174x500	Coatesville,Pa. L7
2¾	180x480	Coatesville,Pa. L7
2¾	186x400	Coatesville,Pa. L7
2¾	192x275	Coatesville,Pa. L7
2¾	195x225	Coatesville,Pa. L7
2⅞	49x210	Geneva,Utah G1
2⅞	54x250	Geneva,Utah G1
2⅞	60x235	Geneva,Utah G1
2⅞	66x215	Geneva,Utah G1
2⅞	72x200	Geneva,Utah G1
3	24x560	Coatesville,Pa. L7
3	32x276	IndianaHarbor,Ind. I-2
3	36x205	Johnstown,Pa. B2
3	36x248	IndianaHarbor,Ind. I-2
3	36x570	Coatesville,Pa. L7
3	40x224	IndianaHarbor,Ind. I-2
3	42x202	Johnstown,Pa. B2
3	44x204	IndianaHarbor,Ind. I-2
3	48x186	IndianaHarbor,Ind. I-2
3	48x560	Coatesville,Pa. L7
3	48x600	Munhall,Pa. U5
3	48x720	Gary,Ind. U5
3	48 1/8x268	Johnstown,Pa. B2
3	49x200	Geneva,Utah G1
3	52x173	IndianaHarbor,Ind. I-2
3	54x240	Geneva,Utah G1
3	54x268	Johnstown,Pa. B2
3	54x600	Munhall,Pa. U5
3	54x680	Gary,Ind. U5
3	54x692	Coatesville,Pa. L7
3	56x160	IndianaHarbor,Ind. I-2
3	60x150	IndianaHarbor,Ind. I-2
3	60x225	Geneva,Utah G1
3	60x240	Johnstown,Pa. B2
3	60x550	SparrowsPoint,Md. B2
3	60x600	Munhall,Pa. U5
3	60x624	Coatesville,Pa. L7
3	60x630	Gary,Ind. U5
3	64x141	IndianaHarbor,Ind. I-2
3	66x210	Geneva,Utah G1
3	66x220	Johnstown,Pa. B2
3	66x500	SparrowsPoint,Md. B2
3	66x564	Coatesville,Pa. L7
3	66x580	Gary,Ind. U5
3	66x600	Munhall,Pa. U5
3	68x122	IndianaHarbor,Ind. I-2
3	72x125	IndianaHarbor,Ind. I-2
3	72x140	Fontana,Calif. K1
3	72x199	Johnstown,Pa. B2
3	72x460	SparrowsPoint,Md. B2
3	72x530	Gary,Ind. U5
3	72x564	Coatesville,Pa. L7
3	72x596	Munhall,Pa. U5
3	76x112	IndianaHarbor,Ind. I-2
3	78x191	Johnstown,Pa. B2
3	78x420	SparrowsPoint,Md. B2
3	78x490	Gary,Ind. U5
3	78x550	Munhall,Pa. U5
3	78x720	Coatesville,Pa. L7
3	80x112	IndianaHarbor,Ind. I-2
3	84x107	IndianaHarbor,Ind. I-2
3	84x170	Johnstown,Pa. B2
3	84x390	SparrowsPoint,Md. B2
3	84x460	Gary,Ind. U5
3	84x511	Munhall,Pa. U5
3	84x720	Coatesville,Pa. L7
3	88x102	IndianaHarbor,Ind. I-2
3	90x164	Johnstown,Pa. B2
3	90x365	SparrowsPoint,Md. B2
3	90x430	Gary,Ind. U5
3	90x477	Munhall,Pa. U5
3	90x720	Coatesville,Pa. L7
3	92x98	IndianaHarbor,Ind. I-2
3	94x94	IndianaHarbor,Ind. I-2
3	96x148	Johnstown,Pa. B2
3	96x345	SparrowsPoint,Md. B2
3	96x405	Gary,Ind. U5
3	96x448	Munhall,Pa. U5
3	96x720	Coatesville,Pa. L7
3	102x138	Johnstown,Pa. B2
3	102x325	SparrowsPt.,Md. B2
3	102x385	Gary,Ind. U5
3	102x420	Munhall,Pa. U5
3	102x720	Coatesville,Pa. L7
3	104x132	Johnstown,Pa. B2
3	108x132	Johnstown,Pa. B2
3	108x305	SparrowsPt.,Md. B2
3	108x360	Gary,Ind. U5
3	108x397	Munhall,Pa. U5
3	108x720	Coatesville,Pa. L7
3	110x125	Johnstown,Pa. B2
3	114x290	SparrowsPt.,Md. B2
3	114x340	Gary,Ind. U5
3	114x376	Munhall,Pa. U5
3	114x675	Coatesville,Pa. L7
3	120x275	SparrowsPt.,Md. B2
3	120x325	Gary,Ind. U5
3	120x357	Munhall,Pa. U5
3	120x675	Coatesville,Pa. L7
3	126x260	SparrowsPt.,Md. B2
3	126x310	Gary,Ind. U5
3	126x340	Munhall,Pa. U5
3	126x650	Coatesville,Pa. L7
3	132x250	SparrowsPt.,Md. B2
3	132x300	Gary,Ind. U5
3	132x323	Munhall,Pa. U5
3	132x650	Coatesville,Pa. L7
3	138x240	SparrowsPt.,Md. B2
3	138x280	Gary,Ind. U5
3	138x311	Munhall,Pa. U5
3	138x600	Coatesville,Pa. L7
3	144x230	SparrowsPt.,Md. B2
3	144x260	Gary,Ind. U5
3	144x298	Munhall,Pa. U5
3	144x600	Coatesville,Pa. L7
3	146x225	SparrowsPt.,Md. B2
3	150x550	Coatesville,Pa. L7
3	156x550	Coatesville,Pa. L7
3	162x540	Coatesville,Pa. L7
3	168x540	Coatesville,Pa. L7
3	174x500	Coatesville,Pa. L7
3	180x480	Coatesville,Pa. L7
3	186x376	Coatesville,Pa. L7
3	192x250	Coatesville,Pa. L7
3	195x225	Coatesville,Pa. L7
3¼	24x520	Coatesville,Pa. L7
3¼	36x515	Coatesville,Pa. L7
3¼	48x520	Coatesville,Pa. L7
3¼	54x640	Coatesville,Pa. L7
3¼	60x576	Coatesville,Pa. L7
3¼	66x141	Fontana,Calif. K1
3¼	66x520	Coatesville,Pa. L7
3¼	72x520	Coatesville,Pa. L7
3¼	78x720	Coatesville,Pa. L7
3¼	84x720	Coatesville,Pa. L7
3¼	90x720	Coatesville,Pa. L7
3¼	96x720	Coatesville,Pa. L7
3¼	102x720	Coatesville,Pa. L7
3¼	108x720	Coatesville,Pa. L7
3¼	114x675	Coatesville,Pa. L7
3¼	120x675	Coatesville,Pa. L7
3¼	126x650	Coatesville,Pa. L7
3¼	132x650	Coatesville,Pa. L7
3¼	138x600	Coatesville,Pa. L7
3¼	144x600	Coatesville,Pa. L7
3¼	150x550	Coatesville,Pa. L7
3¼	156x550	Coatesville,Pa. L7
3¼	162x530	Coatesville,Pa. L7
3¼	168x500	Coatesville,Pa. L7
3¼	174x490	Coatesville,Pa. L7
3¼	180x475	Coatesville,Pa. L7
3¼	186x345	Coatesville,Pa. L7
3¼	192x240	Coatesville,Pa. L7
3¼	195x195	Coatesville,Pa. L7
3½	24x480	Coatesville,Pa. L7
3½	36x175	Johnstown,Pa. B2
3½	36x485	Coatesville,Pa. L7
3½	42x173	Johnstown,Pa. B2
3½	48x480	Coatesville,Pa. L7
3½	48x600	Munhall,Pa. U5
3½	48x635	Gary,Ind. U5
3½	48 1/8x212	Johnstown,Pa. B2
3½	54x212	Johnstown,Pa. B2
3½	54x561	Munhall,Pa. U5
3½	54x590	Gary,Ind. U5
3½	54x592	Coatesville,Pa. L7
3½	60x195	Johnstown,Pa. B2
3½	60x470	SparrowsPoint,Md. B2
3½	60x536	Coatesville,Pa. L7
3½	60x540	Gary,Ind. U5
3½	60x600	Munhall,Pa. U5
3½	66x130	Fontana,Calif. K1
3½	66x179	Johnstown,Pa. B2
3½	66x430	SparrowsPoint,Md. B2
3½	66x484	Coatesville,Pa. L7
3½	66x500	Gary,Ind. U5

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Plates, Sheared

CONTINUED FROM PRECEDING PAGE

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
3½	66x553	Munhall,Pa. U5
3½	72x160	Johnstown,Pa. B2
3½	72x390	SparrowsPoint,Md. B2
3½	72x160	Gary,Ind. U5
3½	72x484	Coatesville,Pa. L7
3½	72x507	Munhall,Pa. U5
3½	78x156	Johnstown,Pa. B2
3½	78x360	SparrowsPoint,Md. B2
3½	78x430	Gary,Ind. U5
3½	78x467	Munhall,Pa. U5
3½	78x720	Coatesville,Pa. L7
3½	84x144	Johnstown,Pa. B2
3½	84x335	SparrowsPoint,Md. B2
3½	84x400	Gary,Ind. U5
3½	84x434	Munhall,Pa. U5
3½	84x720	Coatesville,Pa. L7
3½	90x131	Johnstown,Pa. B2
3½	90x315	SparrowsPoint,Md. B2
3½	90x370	Gary,Ind. U5
3½	90x405	Munhall,Pa. U5
3½	90x720	Coatesville,Pa. L7
3½	96x125	Johnstown,Pa. B2
3½	96x295	SparrowsPoint,Md. B2
3½	96x350	Gary,Ind. U5
3½	96x380	Munhall,Pa. U5
3½	96x720	Coatesville,Pa. L7
3½	102x120	Johnstown,Pa. B2
3½	102x280	SparrowsPt.,Md. B2
3½	102x330	Gary,Ind. U5
3½	102x358	Munhall,Pa. U5
3½	102x720	Coatesville,Pa. L7
3½	104x112	Johnstown,Pa. B2
3½	108x260	SparrowsPt.,Md. B2
3½	108x310	Gary,Ind. U5
3½	108x337	Munhall,Pa. U5
3½	108x720	Coatesville,Pa. L7
3½	114x250	SparrowsPt.,Md. B2
3½	114x290	Gary,Ind. U5
3½	114x320	Munhall,Pa. U5
3½	114x675	Coatesville,Pa. L7
3½	120x235	SparrowsPt.,Md. B2
3½	120x275	Gary,Ind. U5
3½	120x304	Munhall,Pa. U5
3½	120x660	Coatesville,Pa. L7
3½	126x225	SparrowsPt.,Md. B2
3½	126x260	Gary,Ind. U5
3½	126x289	Munhall,Pa. U5
3½	126x635	Coatesville,Pa. L7
3½	132x215	SparrowsPt.,Md. B2
3½	132x250	Gary,Ind. U5
3½	132x276	Munhall,Pa. U5
3½	132x600	Coatesville,Pa. L7
3½	138x205	SparrowsPt.,Md. B2
3½	138x235	Gary,Ind. U5
3½	138x264	Munhall,Pa. U5
3½	138x575	Coatesville,Pa. L7
3½	144x195	SparrowsPt.,Md. B2
3½	144x220	Gary,Ind. U5
3½	144x253	Munhall,Pa. U5
3½	144x550	Coatesville,Pa. L7
3½	146x190	SparrowsPt.,Md. B2
3½	150x525	Coatesville,Pa. L7
3½	156x510	Coatesville,Pa. L7
3½	162x490	Coatesville,Pa. L7
3½	168x470	Coatesville,Pa. L7
3½	174x455	Coatesville,Pa. L7
3½	180x440	Coatesville,Pa. L7
3½	186x320	Coatesville,Pa. L7
3½	192x240	Coatesville,Pa. L7
3½	195x195	Coatesville,Pa. L7
3¾	24x450	Coatesville,Pa. L7
3¾	36x455	Coatesville,Pa. L7
3¾	48x450	Coatesville,Pa. L7
3¾	54x552	Coatesville,Pa. L7
3¾	60x134	Fontana,Calif. K1
3¾	60x500	Coatesville,Pa. L7
3¾	66x452	Coatesville,Pa. L7
3¾	72x452	Coatesville,Pa. L7
3¾	78x720	Coatesville,Pa. L7
3¾	84x720	Coatesville,Pa. L7
3¾	90x720	Coatesville,Pa. L7
3¾	96x720	Coatesville,Pa. L7
3¾	102x720	Coatesville,Pa. L7
3¾	108x690	Coatesville,Pa. L7
3¾	114x650	Coatesville,Pa. L7
3¾	120x615	Coatesville,Pa. L7
3¾	126x590	Coatesville,Pa. L7
3¾	132x565	Coatesville,Pa. L7
3¾	138x540	Coatesville,Pa. L7
3¾	144x520	Coatesville,Pa. L7
3¾	150x490	Coatesville,Pa. L7
3¾	156x480	Coatesville,Pa. L7
3¾	162x460	Coatesville,Pa. L7
3¾	168x440	Coatesville,Pa. L7
3¾	174x425	Coatesville,Pa. L7
3¾	180x410	Coatesville,Pa. L7
3¾	186x300	Coatesville,Pa. L7
3¾	192x240	Coatesville,Pa. L7
3¾	195x195	Coatesville,Pa. L7
4	24x420	Coatesville,Pa. L7
4	36x155	Johnstown,Pa. B2
4	36x425	Coatesville,Pa. L7
4	42x151	Johnstown,Pa. B2
4	48x420	Coatesville,Pa. L7
4	48x550	Gary,Ind. U5
4	48x557	Munhall,Pa. U5
4	48 1/2 x196	Johnstown,Pa. B2
4	54x196	Johnstown,Pa. B2
4	54x487	Munhall,Pa. U5
4	54x505	Gary,Ind. U5
4	54x520	Coatesville,Pa. L7
4	60x126	Fontana,Calif. K1
4	60x174	Johnstown,Pa. B2
4	60x410	SparrowsPoint,Md. B2
4	60x465	Gary,Ind. U5
4	60x468	Coatesville,Pa. L7
4	60x528	Munhall,Pa. U5
4	66x164	Johnstown,Pa. B2
4	66x375	SparrowsPoint,Md. B2
4	66x424	Coatesville,Pa. L7
4	66x430	Gary,Ind. U5
4	66x481	Munhall,Pa. U5
4	72x151	Johnstown,Pa. B2
4	72x345	SparrowsPoint,Md. B2
4	72x395	Gary,Ind. U5
4	72x424	Coatesville,Pa. L7
4	72x441	Munhall,Pa. U5
4	78x137	Johnstown,Pa. B2
4	78x315	SparrowsPoint,Md. B2
4	78x365	Gary,Ind. U5
4	78x406	Munhall,Pa. U5
4	78x720	Coatesville,Pa. L7
4	84x128	Johnstown,Pa. B2
4	84x295	SparrowsPoint,Md. B2
4	84x340	Gary,Ind. U5
4	84x377	Munhall,Pa. U5
4	84x720	Coatesville,Pa. L7
4	90x110	Johnstown,Pa. B2
4	90x275	SparrowsPoint,Md. B2
4	90x315	Gary,Ind. U5
4	90x352	Munhall,Pa. U5
4	90x720	Coatesville,Pa. L7
4	96x113	Johnstown,Pa. B2
4	96x255	SparrowsPoint,Md. B2
4	96x300	Gary,Ind. U5
4	96x329	Munhall,Pa. U5
4	96x720	Coatesville,Pa. L7
4	102x240	SparrowsPt.,Md. B2
4	102x285	Gary,Ind. U5
4	102x311	Munhall,Pa. U5
4	102x685	Coatesville,Pa. L7
4	108x230	SparrowsPt.,Md. B2
4	108x265	Gary,Ind. U5
4	108x293	Munhall,Pa. U5
4	108x650	Coatesville,Pa. L7
4	114x215	SparrowsPt.,Md. B2
4	114x245	Gary,Ind. U5
4	114x278	Munhall,Pa. U5
4	114x610	Coatesville,Pa. L7
4	120x205	SparrowsPt.,Md. B2
4	120x235	Gary,Ind. U5
4	120x263	Munhall,Pa. U5
4	120x575	Coatesville,Pa. L7
4	126x195	SparrowsPt.,Md. B2
4	126x225	Gary,Ind. U5
4	126x251	Munhall,Pa. U5
4	126x550	Coatesville,Pa. L7
4	132x185	SparrowsPt.,Md. B2
4	132x215	Gary,Ind. U5
4	132x239	Munhall,Pa. U5
4	132x530	Coatesville,Pa. L7
4	138x180	SparrowsPt.,Md. B2
4	138x200	Gary,Ind. U5
4	138x228	Munhall,Pa. U5
4	138x600	Coatesville,Pa. L7
4	144x175	SparrowsPt.,Md. B2
4	144x180	Gary,Ind. U5
4	144x220	Munhall,Pa. U5
4	144x485	Coatesville,Pa. L7
4	146x170	SparrowsPt.,Md. B2
4	150x460	Coatesville,Pa. L7
4	156x450	Coatesville,Pa. L7
4	162x430	Coatesville,Pa. L7
4	168x410	Coatesville,Pa. L7
4	174x400	Coatesville,Pa. L7
4	180x385	Coatesville,Pa. L7
4	186x270	Coatesville,Pa. L7
4	192x240	Coatesville,Pa. L7
4	195x195	Coatesville,Pa. L7

For thicker sizes, contact producers.

Hot-Rolled Plates, Universal

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
230	6¼x960	Johnstown,Pa. B2
230	8x960	Johnstown,Pa. B2
230	10x960	Johnstown,Pa. B2
230	12x960	Johnstown,Pa. B2
230	14x960	Johnstown,Pa. B2
230	16x960	Johnstown,Pa. B2
230	18x960	Johnstown,Pa. B2
230	20x960	Johnstown,Pa. B2
230	22x960	Johnstown,Pa. B2
230	24x960	Johnstown,Pa. B2
230	26x960	Johnstown,Pa. B2
230	28x900	Johnstown,Pa. B2
230	30x900	Johnstown,Pa. B2
230-.250	10 to 15 x 240	Youngstown U5
230-.250	21⅛x—	Weirton,W.Va. W6
230-.375	over 6 to 8 x 360	Youngstown U5
230-.375	over 15 to 38 x 360	Youngstown U5
¼	6 1/8x1080	So.Chicago,Ill. U5
¼	6¼x960	Johnstown,Pa. B2
¼	6¼x1080	Clairton,Pa. U5
¼	6⅜x1080	Clairton,Pa. U5
¼	6½x1080	So.Chicago,Ill. U5
¼	6⅝x1080	Clairton,Pa. U5
¼	7x960	Seattle B3
¼	7x1080	Clairton,Pa. U5
¼	7x1320	So.Chicago,Ill. U5
¼	7¼x1080	Clairton,Pa. U5
¼	7⅜x1080	Clairton,Pa. U5
¼	7½x1320	So.Chicago,Ill. U5
¼	7⅝x1080	Clairton,Pa. U5
¼	8x960	Johnstown,Pa. B2
¼	8x960	Seattle B3
¼	8x1080	Clairton,Pa. U5
¼	8x1320	So.Chicago,Ill. U5
¼	8x—	SanFrancisco B3
¼	8 1/4x1080	Clairton,Pa. U5
¼	8 1/8x1080	Clairton,Pa. U5
¼	8 1/2x1320	So.Chicago,Ill. U5
¼	8⅝x1080	Clairton,Pa. U5
¼	9x960	Seattle B3
¼	9x1080	Clairton,Pa. U5
¼	9x1320	So.Chicago,Ill. U5
¼	9¼x1080	Clairton,Pa. U5
¼	9⅜x1080	Clairton,Pa. U5
¼	9½x1320	So.Chicago,Ill. U5
¼	9⅝x1080	Clairton,Pa. U5
¼	10x960	Johnstown,Pa. B2
¼	10x960	Seattle B3
¼	10x1080	Clairton,Pa. U5
¼	10x1320	So.Chicago,Ill. U5
¼	10x1440	SparrowsPoint,Md. B2
¼	11x960	Seattle B3
¼	11x1080	Munhall,Pa. U5
¼	12x840	Minnequa,Colo. C10
¼	12x960	Johnstown,Pa. B2
¼	12x960	Seattle B3
¼	12x1320	So.Chicago,Ill. U5
¼	12x1440	SparrowsPoint,Md. B2
¼	13x960	Seattle B3
¼	13x1080	Munhall,Pa. U5
¼	14x960	Johnstown,Pa. B2
¼	14x960	Seattle B3
¼	14x1320	So.Chicago,Ill. U5
¼	14x1440	SparrowsPoint,Md. B2
¼	15x960	Seattle B3
¼	15x1080	Munhall,Pa. U5
¼	16x252	Fontana,Calif. K1
¼	16x960	Johnstown,Pa. B2
¼	16x960	Seattle B3
¼	16x1320	So.Chicago,Ill. U5
¼	16x1440	SparrowsPoint,Md. B2
¼	17x960	Seattle B3
¼	17x1080	Munhall,Pa. U5
¼	18x720	Seattle, B3
¼	18x960	Johnstown,Pa. B2
¼	18x1320	So.Chicago,Ill. U5
¼	18x1440	SparrowsPoint,Md. B2
¼	19x720	Seattle B3
¼	19x1080	Munhall,Pa. U5
¼	20x720	Seattle B3
¼	20x960	Johnstown,Pa. B2
¼	20x1200	So.Chicago,Ill. U5
¼	20x1440	SparrowsPoint,Md. B2
¼	21x1080	Munhall,Pa. U5
¼	22x960	Johnstown,Pa. B2
¼	22x1200	So.Chicago,Ill. U5
¼	22x1440	SparrowsPoint,Md. B2
¼	23x1080	Munhall,Pa. U5
¼	24x960	Johnstown,Pa. B2
¼	24x1140	So.Chicago,Ill. U5
¼	24x1440	SparrowsPoint,Md. B2
¼	25x1080	Munhall,Pa. U5
¼	26x780	IndianaHarbor,Ind. I-2
¼	26x960	Johnstown,Pa. B2
¼	26x1080	So.Chicago,Ill. U5
¼	26x1440	SparrowsPoint,Md. B2

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Plates, Universal

CONTINUED FROM PRECEDING PAGE

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
¼	27x1080	Munhall,Pa. U5
¼	28x900	Johnstown,Pa. B2
¼	28x1020	So.Chicago,Ill. U5
¼	28x1440	SparrowsPoint,Md. B2
¼	29x1080	Munhall,Pa. U5
¼	30x900	Johnstown,Pa. B2
¼	30x960	So.Chicago,Ill. U5
¼	30x1440	SparrowsPoint,Md. B2
¼	31x1080	Munhall,Pa. U5
¼	32x720	Johnstown,Pa. B2
¼	32x1440	SparrowsPoint,Md. B2
¼	33x720	Munhall,Pa. U5
¼	34x720	Johnstown,Pa. B2
¼	34x1440	SparrowsPoint,Md. B2
¼	36x600	Munhall,Pa. U5
¼	36x720	Johnstown,Pa. B2
¼	36x1440	SparrowsPoint,Md. B2
¼	38x1440	SparrowsPoint,Md. B2
¼	40x1200	SparrowsPoint,Md. B2
¼	42x1200	SparrowsPoint,Md. B2
¼	44x1200	SparrowsPoint,Md. B2
¼	46x1200	SparrowsPoint,Md. B2
¼	48x360	SparrowsPoint,Md. B2
¼	50x360	SparrowsPoint,Md. B2
¼	52x360	SparrowsPoint,Md. B2
¼	54x360	SparrowsPoint,Md. B2
¼	56x360	SparrowsPoint,Md. B2
¼	58x360	SparrowsPoint,Md. B2
¼ 1	16x360	Farrell,Pa. S3
¼ 1	22x360	Lowellville,O. S3
¼ 2	18x24	So.Chicago,Ill. W14
¼ and hvr.	30x360	Economy,Pa. B14
over .250-.375	10 to 15 x 360	Youngstown U5
.251-.375	20¼ x—	Weirton,W.Va. W6
⅜	6⅛x1200	So.Chicago,Ill. U5
⅜	6⅛x960	Johnstown,Pa. B2
⅜	6¼x1080	Clairton,Pa. U5
⅜	6½x1080	Clairton,Pa. U5
⅜	6½x1320	So.Chicago,Ill. U5
⅜	6¾x1080	Clairton,Pa. U5
⅜	7x960	Seattle B3
⅜	7x1080	Clairton,Pa. U5
⅜	7x1320	So.Chicago,Ill. U5
⅜	7¼x1080	Clairton,Pa. U5
⅜	7½x1080	Clairton,Pa. U5
⅜	7½x1320	So.Chicago,Ill. U5
⅜	7⅝x1080	Clairton,Pa. U5
⅜	8x960	Johnstown,Pa. B2
⅜	8x960	Seattle B3
⅜	8x1080	Clairton,Pa. U5
⅜	8x1320	So.Chicago,Ill. U5
⅜	8⅛x1080	Clairton,Pa. U5
⅜	8½x1080	Clairton,Pa. U5
⅜	8½x1320	So.Chicago,Ill. U5
⅜	8⅝x1080	Clairton,Pa. U5
⅜	9x960	Seattle B3
⅜	9x1080	Clairton,Pa. U5
⅜	9x1320	So.Chicago,Ill. U5
⅜	9¼x1080	Clairton,Pa. U5
⅜	9½x1080	Clairton,Pa. U5
⅜	9½x1320	So.Chicago,Ill. U5
⅜	9⅝x1080	Clairton,Pa. U5
⅜	10x960	Johnstown,Pa. B2
⅜	10x960	Seattle B3
⅜	10x1080	Clairton,Pa. U5
⅜	10x1320	So.Chicago,Ill. U5
⅜	10x1440	SparrowsPoint,Md. B2
⅜	11x960	Seattle B3
⅜	11x1200	Munhall,Pa. U5
⅜	12x840	Minnequa,Colo. C10
⅜	12x960	Johnstown,Pa. B2
⅜	12x960	Seattle B3
⅜	12x1320	So.Chicago,Ill. U5
⅜	12x1440	SparrowsPoint,Md. B2
⅜	13x960	Seattle B3
⅜	13x1200	Munhall,Pa. U5
⅜	14x960	Johnstown,Pa. B2
⅜	14x960	Seattle B3
⅜	14x1320	So.Chicago,Ill. U5
⅜	14x1440	SparrowsPoint,Md. B2
⅜	15x960	Seattle B3
⅜	15x1200	Munhall,Pa. U5
⅜	16x252	Fontana,Calif. K1
⅜	16x960	Johnstown,Pa. B2
⅜	16x960	Seattle B3
⅜	16x1320	So.Chicago,Ill. U5
⅜	16x1440	SparrowsPoint,Md. B2
⅜	17x960	Seattle B3
⅜	17x1200	Munhall,Pa. U5
⅜	18x720	Seattle B3
⅜	18x960	Johnstown,Pa. B2
⅜	18x1320	So.Chicago,Ill. U5
⅜	18x1440	SparrowsPoint,Md. B2
⅜	19x720	Seattle B3
⅜	19x1200	Munhall,Pa. U5
⅜	20x720	Seattle B3
⅜	20x960	Johnstown,Pa. B2
⅜	20x1320	So.Chicago,Ill. U5
⅜	20x1440	SparrowsPoint,Md. B2
⅜	21x1200	Munhall,Pa. U5
⅜	22x960	Johnstown,Pa. B2
⅜	22x1320	So.Chicago,Ill. U5
⅜	22x1440	SparrowsPoint,Md. B2
⅜	23x1200	Munhall,Pa. U5
⅜	24x960	Johnstown,Pa. B2
⅜	24x1200	So.Chicago,Ill. U5
⅜	24x1440	SparrowsPoint,Md. B2
⅜	25x1200	Munhall,Pa. U5
⅜	26x780	IndianaHarbor,Ind. I-2
⅜	26x960	Johnstown,Pa. B2
⅜	26x1200	So.Chicago,Ill. U5
⅜	26x1440	SparrowsPoint,Md. B2
⅜	27x1200	Munhall,Pa. U5
⅜	28x960	Johnstown,Pa. B2
⅜	28x1080	So.Chicago,Ill. U5
⅜	28x1440	SparrowsPoint,Md. B2
⅜	29x1200	Munhall,Pa. U5
⅜	30x960	Johnstown,Pa. B2
⅜	30x1200	So.Chicago,Ill. U5
⅜	30x1440	SparrowsPoint,Md. B2
⅜	31x1200	Munhall,Pa. U5
⅜	32x960	Johnstown,Pa. B2
⅜	32x1440	SparrowsPoint,Md. B2
⅜	33x1200	Munhall,Pa. U5
⅜	34x960	Johnstown,Pa. B2
⅜	34x1440	SparrowsPoint,Md. B2
⅜	36x960	Johnstown,Pa. B2
⅜	36x1200	Munhall,Pa. U5
⅜	36x1440	SparrowsPoint,Md. B2
⅜	37x1200	Munhall,Pa. U5
⅜	38x1440	SparrowsPoint,Md. B2
⅜	39x1200	Munhall,Pa. U5
⅜	40x1440	SparrowsPoint,Md. B2
⅜	41x1200	Munhall,Pa. U5
⅜	42x1440	SparrowsPoint,Md. B2
⅜	43x1080	Munhall,Pa. U5
⅜	44x1440	SparrowsPoint,Md. B2
⅜	45x1080	Munhall,Pa. U5
⅜	46x1440	SparrowsPoint,Md. B2
⅜	48x1200	SparrowsPoint,Md. B2
⅜	50x1200	SparrowsPoint,Md. B2
⅜	52x1200	SparrowsPoint,Md. B2
⅜	54x1200	SparrowsPoint,Md. B2
⅜	56x960	SparrowsPoint,Md. B2
⅜	58x960	SparrowsPoint,Md. B2
⅜	60x480	SparrowsPoint,Md. B2
.375-1.5625	over 6 to 8½ x 480	Youngstown U5
.376-.437	19½ x—	Weirton,W.Va. W6
7/16	6⅛x1200	So.Chicago,Ill. U5
7/16	6⅛x960	Johnstown,Pa. B2
7/16	6¼x1080	Clairton,Pa. U5
7/16	6½x1080	Clairton,Pa. U5
7/16	6½x1320	So.Chicago,Ill. U5
7/16	6⅝x1080	Clairton,Pa. U5
7/16	7x1068	Clairton,Pa. U5
7/16	7x1140	Seattle B3
7/16	7x1320	So.Chicago,Ill. U5
7/16	7¼x1068	Clairton,Pa. U5
7/16	7½x1068	Clairton,Pa. U5
7/16	7½x1320	So.Chicago,Ill. U5
7/16	7⅝x1056	Clairton,Pa. U5
7/16	8x960	Johnstown,Pa. B2
7/16	8x960	Seattle B3
7/16	8x1056	Clairton,Pa. U5
7/16	8x1320	So.Chicago,Ill. U5
7/16	8¼x1044	Clairton,Pa. U5
7/16	8½x1044	Clairton,Pa. U5
7/16	8½x1320	So.Chicago,Ill. U5
7/16	8⅝x1044	Clairton,Pa. U5
7/16	9x960	Seattle B3
7/16	9x1032	Clairton,Pa. U5
7/16	9x1320	So.Chicago,Ill. U5
7/16	9¼x1032	Clairton,Pa. U5
7/16	9½x1020	Clairton,Pa. U5
7/16	9½x1320	So.Chicago,Ill. U5
7/16	9⅝x1020	Clairton,Pa. U5
7/16	10x720	Seattle B3
7/16	10x960	Johnstown,Pa. B2
7/16	10x1020	Clairton,Pa. U5
7/16	10x1320	So.Chicago,Ill. U5
7/16	10x1440	SparrowsPoint,Md. B2
7/16	11x720	Seattle B3
7/16	11x1200	Munhall,Pa. U5
7/16	12x840	Minnequa,Colo. C10
7/16	12x960	Johnstown,Pa. B2
7/16	12x1104	Seattle B3
7/16	12x1320	So.Chicago,Ill. U5
7/16	12x1440	SparrowsPoint,Md. B2
7/16	13x1020	Seattle B3
7/16	13x1200	Munhall,Pa. U5
7/16	14x948	Seattle B3
7/16	14x960	Johnstown,Pa. B2
7/16	14x1320	So.Chicago,Ill. U5
7/16	14x1440	SparrowsPoint,Md. B2
7/16	15x900	Seattle B3
7/16	15x1200	Munhall,Pa. U5
7/16	16x876	Seattle B3
7/16	16x960	Johnstown,Pa. B2
7/16	16x1320	So.Chicago,Ill. U5
7/16	16x1440	SparrowsPoint,Md. B2
7/16	17x876	Seattle B3
7/16	17x1200	Munhall,Pa. U5
7/16	18x924	Seattle B3
½	21x1068	Seattle B3
½	21x1200	Munhall,Pa. U5
½	22x960	Johnstown,Pa. B2
½	22x1068	Seattle B3
½	22x1320	So.Chicago,Ill. U5
½	22x1440	SparrowsPoint,Md. B2
½	23x1200	Munhall,Pa. U5
½	24x960	Johnstown,Pa. B2
½	24x1320	So.Chicago,Ill. U5
½	24x1440	SparrowsPoint,Md. B2
½	25x1200	Munhall,Pa. U5
½	26x780	IndianaHarbor,Ind. I-2
½	26x960	Johnstown,Pa. B2
½	26x1320	So.Chicago,Ill. U5
½	26x1440	SparrowsPoint,Md. B2
½	27x1200	Munhall,Pa. U5
½	28x960	Johnstown,Pa. B2
½	28x1260	So.Chicago,Ill. U5
½	28x1440	SparrowsPoint,Md. B2
½	29x1200	Munhall,Pa. U5
½	30x960	Johnstown,Pa. B2
½	30x1200	So.Chicago,Ill. U5
½	30x1440	SparrowsPoint,Md. B2
½	31x1200	Munhall,Pa. U5
½	32x960	Johnstown,Pa. B2
½	32x1440	SparrowsPoint,Md. B2
½	33x1200	Munhall,Pa. U5
½	34x960	Johnstown,Pa. B2
½	34x1440	SparrowsPoint,Md. B2
½	36x960	Johnstown,Pa. B2
½	36x1200	Munhall,Pa. U5
½	36x1440	SparrowsPoint,Md. B2
½	37x1200	Munhall,Pa. U5
½	38x1440	SparrowsPoint,Md. B2
½	39x1200	Munhall,Pa. U5
½	40x1440	SparrowsPoint,Md. B2
½	41x1200	Munhall,Pa. U5
½	42x1440	SparrowsPoint,Md. B2
½	43x1080	Munhall,Pa. U5
½	44x1440	SparrowsPoint,Md. B2
½	45x1080	Munhall,Pa. U5
½	46x1440	SparrowsPoint,Md. B2
½	48x1200	SparrowsPoint,Md. B2
½	50x1200	SparrowsPoint,Md. B2
½	52x1200	SparrowsPoint,Md. B2
½	54x1200	SparrowsPoint,Md. B2
½	56x960	SparrowsPoint,Md. B2
½	58x960	SparrowsPoint,Md. B2
½	60x480	SparrowsPoint,Md. B2

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Plates, Universal

CONTINUED FROM PRECEDING PAGE

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
¼	18x960	Johnstown,Pa. B2
¼	18x1320	So.Chicago,Ill. U5
¼	18x1440	SparrowsPoint,Md. B2
¼	19x888	Seattle B3
¼	19x1200	Munhall,Pa. U5
¼	20x960	Johnstown,Pa. B2
¼	20x960	Seattle B3
¼	20x1320	So.Chicago,Ill. U5
¼	20x1440	SparrowsPoint,Md. B2
¼	21x924	Seattle B3
¼	21x1200	Munhall,Pa. U5
¼	22x864	Seattle B3
¼	22x960	Johnstown,Pa. B2
¼	22x1320	So.Chicago,Ill. U5
¼	22x1440	SparrowsPoint,Md. B2
¼	23x1200	Munhall,Pa. U5
¼	24x960	Johnstown,Pa. B2
¼	24x1320	So.Chicago,Ill. U5
¼	24x1440	SparrowsPoint,Md. B2
¼	25x1200	Munhall,Pa. U5
¼	26x780	IndianaHarbor,Ind. I-2
¼	26x960	Johnstown,Pa. B2
¼	26x1320	So.Chicago,Ill. U5
¼	26x1440	SparrowsPoint,Md. B2
¼	27x1200	Munhall,Pa. U5
¼	28x960	Johnstown,Pa. B2
¼	28x1320	So.Chicago,Ill. U5
¼	28x1440	SparrowsPoint,Md. B2
¼	29x1200	Munhall,Pa. U5
¼	30x960	Johnstown,Pa. B2
¼	30x1320	So.Chicago,Ill. U5
¼	30x1440	SparrowsPoint,Md. B2
¼	31x1200	Munhall,Pa. U5
¼	32x960	Johnstown,Pa. B2
¼	32x1440	SparrowsPoint,Md. B2
¼	33x1200	Munhall,Pa. U5
¼	34x960	Johnstown,Pa. B2
¼	34x1440	SparrowsPoint,Md. B2
¼	36x960	Johnstown,Pa. B2
¼	36x1200	Munhall,Pa. U5
¼	36x1440	SparrowsPoint,Md. B2
¼	37x1200	Munhall,Pa. U5
¼	38x1440	SparrowsPoint,Md. B2
¼	39x1200	Munhall,Pa. U5
¼	40x1440	SparrowsPoint,Md. B2
¼	41x1200	Munhall,Pa. U5
¼	42x1440	SparrowsPoint,Md. B2
¼	43x1200	Munhall,Pa. U5
¼	44x1440	SparrowsPoint,Md. B2
¼	45x1200	Munhall,Pa. U5
¼	46x1440	SparrowsPoint,Md. B2
¼	47x1080	Munhall,Pa. U5
¼	48x1080	Munhall,Pa. U5
¼	48x1200	SparrowsPoint,Md. B2
¼	50x1200	SparrowsPoint,Md. B2
¼	52x1200	SparrowsPoint,Md. B2
¼	54x1200	SparrowsPoint,Md. B2
¼	56x960	SparrowsPoint,Md. B2
¼	58x960	SparrowsPoint,Md. B2
¼	60x480	SparrowsPoint,Md. B2
.438—.500	18½x—	Weirton,W.Va. W6
½	6⅛x1200	So.Chicago,Ill. U5
½	6¼x960	Johnstown,Pa. B2
½	6¼x1080	Clairton,Pa. U5
½	6½x1080	Clairton,Pa. U5
½	6½x1320	So.Chicago,Ill. U5
½	6¾x1080	Clairton,Pa. U5
½	7x1056	Clairton,Pa. U5
½	7x1140	Seattle B3
½	7x1320	So.Chicago,Ill. U5
½	7¼x1032	Clairton,Pa. U5
½	7½x1032	Clairton,Pa. U5
½	7½x1320	So.Chicago,Ill. U5
½	7¾x1020	Clairton,Pa. U5
½	8x960	Johnstown,Pa. B2
½	8x960	Seattle B3
½	8x1020	Clairton,Pa. U5
½	8x1320	So.Chicago,Ill. U5
½	8x—	SanFrancisco B3
½	8¼x1008	Clairton,Pa. U5
½	8½x1008	Clairton,Pa. U5
½	8½x1320	So.Chicago,Ill. U5
½	8¾x1008	Clairton,Pa. U5
½	9x720	Seattle B3
½	9x1008	Clairton,Pa. U5
½	9x1320	So.Chicago,Ill. U5
½	9¼x1008	Clairton,Pa. U5
½	9½x996	Clairton,Pa. U5
½	9½x1320	So.Chicago,Ill. U5
½	9⅝x960	Clairton,Pa. U5
½	10x720	Seattle B3
½	10x948	Clairton,Pa. U5
½	10x960	Johnstown,Pa. B2
½	10x1320	So.Chicago,Ill. U5
½	10x1440	SparrowsPoint,Md. B2
½	11x1140	Seattle B3
½	11x1200	Munhall,Pa. U5
½	12x840	Minnequa,Colo. C10
½	12x960	Johnstown,Pa. B2
½	12x972	Seattle B3
½	12x1320	So.Chicago,Ill. U5
½	12x1440	SparrowsPoint,Md. B2
½	13x900	Seattle B3
½	13x1200	Munhall,Pa. U5
½	14x828	Seattle B3
½	14x960	Johnstown,Pa. B2
½	14x1320	So.Chicago,Ill. U5
½	14x1440	SparrowsPoint,Md. B2
½	15x780	Seattle B3
½	15x1200	Munhall,Pa. U5
½	16x480	Fontana,Calif. K1
½	16x804	Seattle B3
½	16x960	Johnstown,Pa. B2
½	16x1320	So.Chicago,Ill. U5
½	16x1440	SparrowsPoint,Md. B2
½	17x756	Seattle B3
½	17x1200	Munhall,Pa. U5
½	18x816	Seattle B3
½	18x960	Johnstown,Pa. B2
½	18x1320	So.Chicago,Ill. U5
½	18x1440	SparrowsPoint,Md. B2
½	19x768	Seattle B3
½	19x1200	Munhall,Pa. U5
½	20x816	Seattle B3
½	20x960	Johnstown,Pa. B2
½	20x1320	So.Chicago,Ill. U5
½	20x1440	SparrowsPoint,Md. B2
½	21x780	Seattle B3
½	21x1200	Munhall,Pa. U5
½	22x768	Seattle B3
½	22x960	Johnstown,Pa. B2
½	22x1320	So.Chicago,Ill. U5
½	22x1440	SparrowsPoint,Md. B2
½	23x1200	Munhall,Pa. U5
½	24x960	Johnstown,Pa. B2
½	24x1320	So.Chicago,Ill. U5
½	24x1440	SparrowsPoint,Md. B2
½	25x1200	Munhall,Pa. U5
½	26x780	IndianaHarbor,Ind. I-2
½	26x960	Johnstown,Pa. B2
½	26x1320	So.Chicago,Ill. U5
½	26x1440	SparrowsPoint,Md. B2
½	27x1200	Munhall,Pa. U5
½	28x960	Johnstown,Pa. B2
½	28x1320	So.Chicago,Ill. U5
½	28x1440	SparrowsPoint,Md. B2
½	29x1200	Munhall,Pa. U5
½	30x960	Johnstown,Pa. B2
½	30x1320	So.Chicago,Ill. U5
½	30x1440	SparrowsPoint,Md. B2
½	31x1200	Munhall,Pa. U5
½	32x960	Johnstown,Pa. B2
½	32x1440	SparrowsPoint,Md. B2
½	33x1200	Munhall,Pa. U5
½	34x960	Johnstown,Pa. B2
½	34x1440	SparrowsPoint,Md. B2
½	36x960	Johnstown,Pa. B2
½	36x1200	Munhall,Pa. U5
½	36x1440	SparrowsPoint,Md. B2
½	37x1200	Munhall,Pa. U5
½	38x1440	SparrowsPoint,Md. B2
½	39x1200	Munhall,Pa. U5
½	40x1440	SparrowsPoint,Md. B2
½	41x1200	Munhall,Pa. U5
½	42x1440	SparrowsPoint,Md. B2
½	43x1200	Munhall,Pa. U5
½	44x1440	SparrowsPoint,Md. B2
½	45x1200	Munhall,Pa. U5
½	46x1440	SparrowsPoint,Md. B2
½	47x1200	Munhall,Pa. U5
½	48x1080	SparrowsPoint,Md. B2
½	48x1440	SparrowsPoint,Md. B2
½	50x1440	SparrowsPoint,Md. B2
½	52x1440	SparrowsPoint,Md. B2
½	54x1440	SparrowsPoint,Md. B2
½	56x1440	SparrowsPoint,Md. B2
½	58x1440	SparrowsPoint,Md. B2
½	60x480	SparrowsPoint,Md. B2
⅝	6⅛x1200	So.Chicago,Ill. U5
⅝	6¼x960	Johnstown,Pa. B2
⅝	6¼x1044	Clairton,Pa. U5
⅝	6½x1032	Clairton,Pa. U5
⅝	6½x1320	So.Chicago,Ill. U5
⅝	6¾x1020	Clairton,Pa. U5
⅝	7x1068	Clairton,Pa. U5
⅝	7x1140	Seattle B3
⅝	7x1320	So.Chicago,Ill. U5
⅝	7¼x996	Clairton,Pa. U5
⅝	7½x972	Clairton,Pa. U5
⅝	7½x1320	So.Chicago,Ill. U5
⅝	7¾x960	Clairton,Pa. U5
⅝	8x948	Clairton,Pa. U5
⅝	8x960	Johnstown,Pa. B2
⅝	8x960	Seattle B3
⅝	8x1320	So.Chicago,Ill. U5
⅝	8¼x936	Clairton,Pa. U5
⅝	8½x924	Clairton,Pa. U5
⅝	8½x1320	So.Chicago,Ill. U5
⅝	8¾x912	Clairton,Pa. U5
⅝	9x720	Seattle B3
⅝	9x900	Clairton,Pa. U5
⅝	9x1320	So.Chicago,Ill. U5
⅝	9¼x888	Clairton,Pa. U5
⅝	9½x864	Clairton,Pa. U5
⅝	9½x1320	So.Chicago,Ill. U5
⅝	9⅝x852	Clairton,Pa. U5
⅝	10x840	Clairton,Pa. U5
⅝	10x960	Johnstown,Pa. B2
⅝	10x1116	Seattle B3
⅝	10x1320	So.Chicago,Ill. U5
⅝	10x1440	SparrowsPoint,Md. B2
⅝	11x1032	Seattle B3
⅝	11x1200	Munhall,Pa. U5
⅝	12x840	Minnequa,Colo. C10
⅝	12x960	Johnstown,Pa. B2
⅝	12x1068	Seattle B3
⅝	12x1320	So.Chicago,Ill. U5
⅝	12x1440	SparrowsPoint,Md. B2
⅝	13x804	Seattle B3
⅝	13x1200	Munhall,Pa. U5
⅝	14x744	Seattle B3
⅝	14x960	Johnstown,Pa. B2
⅝	14x1320	So.Chicago,Ill. U5
⅝	14x1440	SparrowsPoint,Md. B2
⅝	15x696	Seattle B3
⅝	15x1200	Munhall,Pa. U5
⅝	16x720	Seattle B3
⅝	16x960	Johnstown,Pa. B2
⅝	16x1320	So.Chicago,Ill. U5
⅝	16x1440	SparrowsPoint,Md. B2
⅝	17x684	Seattle B3
⅝	17x1200	Munhall,Pa. U5
⅝	18x732	Seattle B3
⅝	18x960	Johnstown,Pa. B2
⅝	18x1320	So.Chicago,Ill. U5
⅝	18x1440	SparrowsPoint,Md. B2
⅝	19x684	Seattle B3
⅝	19x1200	Munhall,Pa. U5
⅝	20x744	Seattle B3
⅝	20x960	Johnstown,Pa. B2
⅝	20x1320	So.Chicago,Ill. U5
⅝	20x1440	SparrowsPoint,Md. B2
⅝	21x708	Seattle B3
⅝	21x1200	Munhall,Pa. U5
⅝	22x684	Seattle B3
⅝	22x960	Johnstown,Pa. B2
⅝	22x1320	So.Chicago,Ill. U5
⅝	22x1440	SparrowsPoint,Md. B2
⅝	23x1200	Munhall,Pa. U5
⅝	24x960	Johnstown,Pa. B2
⅝	24x1320	So.Chicago,Ill. U5
⅝	24x1440	SparrowsPoint,Md. B2
⅝	25x1200	Munhall,Pa. U5
⅝	26x780	IndianaHarbor,Ind. I-2
⅝	26x960	Johnstown,Pa. B2
⅝	26x1320	So.Chicago,Ill. U5
⅝	26x1440	SparrowsPoint,Md. B2
⅝	27x1200	Munhall,Pa. U5
⅝	28x960	Johnstown,Pa. B2
⅝	28x1320	So.Chicago,Ill. U5
⅝	28x1440	SparrowsPoint,Md. B2
⅝	29x1200	Munhall,Pa. U5
⅝	30x960	Johnstown,Pa. B2
⅝	30x1320	So.Chicago,Ill. U5
⅝	30x1440	SparrowsPoint,Md. B2
⅝	31x1200	Munhall,Pa. U5
⅝	32x960	Johnstown,Pa. B2
⅝	32x1440	SparrowsPoint,Md. B2
⅝	33x1200	Munhall,Pa. U5
⅝	34x960	Johnstown,Pa. B2
⅝	34x1440	SparrowsPoint,Md. B2
⅝	36x960	Johnstown,Pa. B2
⅝	36x1200	Munhall,Pa. U5
⅝	36x1440	SparrowsPoint,Md. B2
⅝	37x1200	Munhall,Pa. U5
⅝	38x1440	SparrowsPoint,Md. B2
⅝	39x1200	Munhall,Pa. U5
⅝	40x1440	SparrowsPoint,Md. B2
⅝	41x1200	Munhall,Pa. U5
⅝	42x1440	SparrowsPoint,Md. B2
⅝	43x1200	Munhall,Pa. U5
⅝	44x1440	SparrowsPoint,Md. B2
⅝	45x1200	Munhall,Pa. U5
⅝	46x1440	SparrowsPoint,Md. B2
⅝	47x1200	Munhall,Pa. U5
⅝	48x1200	Munhall,Pa. U5
⅝	48x1440	SparrowsPoint,Md. B2
⅝	50x1440	SparrowsPoint,Md. B2
⅝	52x1440	SparrowsPoint,Md. B2
⅝	54x1440	SparrowsPoint,Md. B2
⅝	56x1440	SparrowsPoint,Md. B2
⅝	58x1440	SparrowsPoint,Md. B2
⅝	60x480	SparrowsPoint,Md. B2
¾	6⅛x1200	So.Chicago,Ill. U5
¾	6¼x960	Johnstown,Pa. B2
¾	6¼x996	Clairton,Pa. U5
¾	6½x960	Clairton,Pa. U5
¾	6½x1320	So.Chicago,Ill. U5
¾	6¾x948	Clairton,Pa. U5
¾	7x924	Clairton,Pa. U5
¾	7x1140	Seattle B3
¾	7x1320	So.Chicago,Ill. U5
¾	7¼x912	Clairton,Pa. U5
¾	7½x888	Clairton,Pa. U5
¾	7½x1320	So.Chicago,Ill. U5
¾	7¾x876	Clairton,Pa. U5
¾	8x720	Seattle B3
¾	8x852	Clairton,Pa. U5
¾	8x960	Johnstown,Pa. B2
¾	8x1320	So.Chicago,Ill. U5
¾	8x—	SanFrancisco B3
¾	8¼x828	Clairton,Pa. U5
¾	8½x804	Clairton,Pa. U5
¾	8½x1320	So.Chicago,Ill. U5
¾	8⅝x780	Clairton,Pa. U5
¾	9x768	Clairton,Pa. U5
¾	9x1152	Seattle B3
¾	9x1320	So.Chicago,Ill. U5

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Plates, Universal

CONTINUED FROM PRECEDING PAGE

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
5/16	9¾x768	Clairton,Pa. U5
5/16	9½x744	Clairton,Pa. U5
5/16	9½x1320	So.Chicago,Ill. U5
5/16	9¾x744	Clairton,Pa. U5
5/16	10x744	Clairton,Pa. U5
5/16	10x960	Johnstown,Pa. B2
5/16	10x1032	Seattle B3
5/16	10x1320	So.Chicago,Ill. U5
5/16	10x1440	SparrowsPoint,Md. B2
5/16	11x936	Seattle B3
5/16	11x1200	Munhall,Pa. U5
5/16	12x768	Seattle B3
5/16	12x840	Minnequa,Colo. C10
5/16	12x960	Johnstown,Pa. B2
5/16	12x1320	So.Chicago,Ill. U5
5/16	12x1440	SparrowsPoint,Md. B2
5/16	13x720	Seattle B3
5/16	13x1200	Munhall,Pa. U5
5/16	14x660	Seattle B3
5/16	14x960	Johnstown,Pa. B2
5/16	14x1320	So.Chicago,Ill. U5
5/16	14x1440	SparrowsPoint,Md. B2
5/16	15x624	Seattle B3
5/16	15x1200	Munhall,Pa. U5
5/16	16x480	Fontana,Calif. K1
5/16	16x648	Seattle B3
5/16	16x960	Johnstown,Pa. B2
5/16	16x1320	So.Chicago,Ill. U5
5/16	16x1440	SparrowsPoint,Md. B2
5/16	17x612	Seattle B3
5/16	17x1200	Munhall,Pa. U5
5/16	18x648	Seattle B3
5/16	18x960	Johnstown,Pa. B2
5/16	18x1320	So.Chicago,Ill. U5
5/16	18x1440	SparrowsPoint,Md. B2
5/16	19x612	Seattle B3
5/16	19x1200	Munhall,Pa. U5
5/16	20x672	Seattle B3
5/16	20x960	Johnstown,Pa. B2
5/16	20x1320	So.Chicago,Ill. U5
5/16	20x1440	SparrowsPoint,Md. B2
5/16	21x636	Seattle B3
5/16	21x1200	Munhall,Pa. U5
5/16	22x612	Seattle B3
5/16	22x960	Johnstown,Pa. B2
5/16	22x1320	So.Chicago,Ill. U5
5/16	22x1440	SparrowsPoint,Md. B2
5/16	23x1200	Munhall,Pa. U5
5/16	24x960	Johnstown,Pa. B2
5/16	24x1320	So.Chicago,Ill. U5
5/16	24x1440	SparrowsPoint,Md. B2
5/16	25x1200	Munhall,Pa. U5
5/16	26x780	IndianaHarbor,Ind. I-2
5/16	26x960	Johnstown,Pa. B2
5/16	26x1320	So.Chicago,Ill. U5
5/16	26x1440	SparrowsPoint,Md. B2
5/16	27x1200	Munhall,Pa. U5
5/16	28x960	Johnstown,Pa. B2
5/16	28x1320	So.Chicago,Ill. U5
5/16	28x1440	SparrowsPoint,Md. B2
5/16	29x1200	Munhall,Pa. U5
5/16	30x960	Johnstown,Pa. B2
5/16	30x1320	So.Chicago,Ill. U5
5/16	30x1440	SparrowsPoint,Md. B2
5/16	31x1200	Munhall,Pa. U5
5/16	32x960	Johnstown,Pa. B2
5/16	32x1440	SparrowsPoint,Md. B2
5/16	33x1200	Munhall,Pa. U5
5/16	34x960	Johnstown,Pa. B2
5/16	34x1440	SparrowsPoint,Md. B2
5/16	36x960	Johnstown,Pa. B2
5/16	36x1200	Munhall,Pa. U5
5/16	36x1440	SparrowsPoint,Md. B2
5/16	37x1200	Munhall,Pa. U5
5/16	38x1440	SparrowsPoint,Md. B2
5/16	39x1200	Munhall,Pa. U5
5/16	40x1440	SparrowsPoint,Md. B2
5/16	41x1200	Munhall,Pa. U5
5/16	42x1440	SparrowsPoint,Md. B2
5/16	43x1200	Munhall,Pa. U5
5/16	44x1440	SparrowsPoint,Md. B2
5/16	45x1200	Munhall,Pa. U5
5/16	46x1440	SparrowsPoint,Md. B2
5/16	47x1200	Munhall,Pa. U5
5/16	48x1200	Munhall,Pa. U5
5/16	48x1440	SparrowsPoint,Md. B2
5/16	50x1440	SparrowsPoint,Md. B2
5/16	52x1440	SparrowsPoint,Md. B2
5/16	54x1440	SparrowsPoint,Md. B2
5/16	56x1440	SparrowsPoint,Md. B2
5/16	58x1440	SparrowsPoint,Md. B2
5/16	60x480	SparrowsPoint,Md. B2
11/32	6 1/16x1200	So.Chicago,Ill. U5
11/32	6½x1320	So.Chicago,Ill. U5
11/32	7x1320	So.Chicago,Ill. U5
11/32	7½x1320	So.Chicago,Ill. U5
11/32	8x1320	So.Chicago,Ill. U5
11/32	8½x1320	So.Chicago,Ill. U5
11/32	9x1320	So.Chicago,Ill. U5
11/32	9½x1320	So.Chicago,Ill. U5
11/32	10x1320	So.Chicago,Ill. U5
11/32	12x1320	So.Chicago,Ill. U5
11/32	14x1320	So.Chicago,Ill. U5
11/32	16x1320	So.Chicago,Ill. U5
11/32	18x1320	So.Chicago,Ill. U5
11/32	20x1320	So.Chicago,Ill. U5
11/32	22x1320	So.Chicago,Ill. U5
11/32	24x1320	So.Chicago,Ill. U5
11/32	26x780	IndianaHarbor,Ind. I-2
11/32	26x1320	So.Chicago,Ill. U5
11/32	28x1320	So.Chicago,Ill. U5
11/32	30x1320	So.Chicago,Ill. U5
11/32	6 1/16x1200	So.Chicago,Ill. U5
11/32	6⅛x960	Johnstown,Pa. B2
11/32	6¼x828	Clairton,Pa. U5
11/32	6½x816	Clairton,Pa. U5
11/32	6½x1320	So.Chicago,Ill. U5
11/32	6¾x804	Clairton,Pa. U5
11/32	7x792	Clairton,Pa. U5
11/32	7x1140	Seattle B3
11/32	7x1320	So.Chicago,Ill. U5
11/32	7¼x768	Clairton,Pa. U5
11/32	7½x756	Clairton,Pa. U5
11/32	7½x1320	So.Chicago,Ill. U5
11/32	7¾x744	Clairton,Pa. U5
11/32	8x732	Clairton,Pa. U5
11/32	8x960	Johnstown,Pa. B2
11/32	8x1068	Seattle B3
11/32	8x1320	So.Chicago,Ill. U5
11/32	8x—	SanFrancisco B3
11/32	8¼x720	Clairton,Pa. U5
11/32	8½x696	Clairton,Pa. U5
11/32	8½x1320	So.Chicago,Ill. U5
11/32	8¾x684	Clairton,Pa. U5
11/32	9x672	Clairton,Pa. U5
11/32	9x948	Seattle B3
11/32	9x1320	So.Chicago,Ill. U5
11/32	9¼x672	Clairton,Pa. U5
11/32	9½x660	Clairton,Pa. U5
11/32	9½x1320	So.Chicago,Ill. U5
11/32	9¾x636	Clairton,Pa. U5
11/32	10x624	Clairton,Pa. U5
11/32	10x864	Seattle B3
11/32	10x960	Johnstown,Pa. B2
11/32	10x1320	So.Chicago,Ill. U5
11/32	10x1440	SparrowsPoint,Md. B2
11/32	11x780	Seattle B3
11/32	11x1200	Munhall,Pa. U5
11/32	12x648	Seattle B3
11/32	12x840	Minnequa,Colo. C10
11/32	12x960	Johnstown,Pa. B2
11/32	12x1320	So.Chicago,Ill. U5
11/32	12x1440	SparrowsPoint,Md. B2
11/32	13x600	Seattle B3
11/32	13x1200	Munhall,Pa. U5
11/32	14x552	Seattle B3
11/32	14x960	Johnstown,Pa. B2
11/32	14x1320	So.Chicago,Ill. U5
11/32	14x1440	SparrowsPoint,Md. B2
11/32	15x516	Seattle B3
11/32	15x1200	Munhall,Pa. U5
11/32	16x480	Fontana,Calif. K1
11/32	16x540	Seattle B3
11/32	16x960	Johnstown,Pa. B2
11/32	16x1320	So.Chicago,Ill. U5
11/32	16x1440	SparrowsPoint,Md. B2
11/32	17x504	Seattle B3
11/32	17x1200	Munhall,Pa. U5
11/32	18x540	Seattle B3
11/32	18x960	Johnstown,Pa. B2
11/32	18x1320	So.Chicago,Ill. U5
11/32	18x1440	SparrowsPoint,Md. B2
11/32	19x504	Seattle B3
11/32	19x1200	Munhall,Pa. U5
11/32	20x552	Seattle B3
11/32	20x960	Johnstown,Pa. B2
11/32	20x1320	So.Chicago,Ill. U5
11/32	20x1440	SparrowsPoint,Md. B2
11/32	21x528	Seattle B3
11/32	21x1200	Munhall,Pa. U5
11/32	22x504	Seattle B3
11/32	22x960	Johnstown,Pa. B2
11/32	22x1320	So.Chicago,Ill. U5
11/32	22x1440	SparrowsPoint,Md. B2
11/32	23x1200	Munhall,Pa. U5
11/32	24x960	Johnstown,Pa. B2
11/32	24x1320	So.Chicago,Ill. U5
11/32	24x1440	SparrowsPoint,Md. B2
11/32	25x1200	Munhall,Pa. U5
11/32	26x780	IndianaHarbor,Ind. I-2
11/32	26x960	Johnstown,Pa. B2
11/32	26x1320	So.Chicago,Ill. U5
11/32	26x1440	SparrowsPoint,Md. B2
11/32	27x1200	Munhall,Pa. U5
11/32	28x960	Johnstown,Pa. B2
11/32	28x1320	So.Chicago,Ill. U5
11/32	28x1440	SparrowsPoint,Md. B2
11/32	29x1200	Munhall,Pa. U5
11/32	30x960	Johnstown,Pa. B2
11/32	30x1320	So.Chicago,Ill. U5
11/32	30x1440	SparrowsPoint,Md. B2
11/32	31x1200	Munhall,Pa. U5
11/32	32x960	Johnstown,Pa. B2
11/32	32x1440	SparrowsPoint,Md. B2
11/32	33x1200	Munhall,Pa. U5
11/32	34x960	Johnstown,Pa. B2
11/32	34x1440	SparrowsPoint,Md. B2
11/32	36x960	Johnstown,Pa. B2
11/32	36x1200	Munhall,Pa. U5
11/32	36x1440	SparrowsPoint,Md. B2
11/32	37x1200	Munhall,Pa. U5
11/32	38x1440	SparrowsPoint,Md. B2
11/32	39x1200	Munhall,Pa. U5
11/32	40x1440	SparrowsPoint,Md. B2
11/32	41x1200	Munhall,Pa. U5
11/32	42x1440	SparrowsPoint,Md. B2
11/32	43x1200	Munhall,Pa. U5
11/32	44x1440	SparrowsPoint,Md. B2
11/32	45x1200	Munhall,Pa. U5
11/32	46x1440	SparrowsPoint,Md. B2
11/32	47x1200	Munhall,Pa. U5
11/32	48x1200	Munhall,Pa. U5
11/32	48x1440	SparrowsPoint,Md. B2
11/32	50x1440	SparrowsPoint,Md. B2
11/32	52x1440	SparrowsPoint,Md. B2
11/32	54x1440	SparrowsPoint,Md. B2
11/32	56x1440	SparrowsPoint,Md. B2
11/32	58x1440	SparrowsPoint,Md. B2
11/32	60x480	SparrowsPoint,Md. B2
23/64	6 1/16x1200	So.Chicago,Ill. U5
23/64	6¼x696	IndianaHarbor,Ind. I-2
23/64	6½x1320	So.Chicago,Ill. U5
23/64	7x1320	So.Chicago,Ill. U5
23/64	7½x1320	So.Chicago,Ill. U5
23/64	8x1320	So.Chicago,Ill. U5
23/64	8½x1320	So.Chicago,Ill. U5
23/64	9x1320	So.Chicago,Ill. U5
23/64	9½x1320	So.Chicago,Ill. U5
23/64	10x1320	So.Chicago,Ill. U5
23/64	12x1320	So.Chicago,Ill. U5
23/64	14x1320	So.Chicago,Ill. U5
23/64	16x1320	So.Chicago,Ill. U5
23/64	18x1320	So.Chicago,Ill. U5
23/64	20x1320	So.Chicago,Ill. U5
23/64	22x1320	So.Chicago,Ill. U5
23/64	24x1320	So.Chicago,Ill. U5
23/64	26x780	IndianaHarbor,Ind. I-2
23/64	26x1320	So.Chicago,Ill. U5
23/64	28x1320	So.Chicago,Ill. U5
23/64	30x1320	So.Chicago,Ill. U5
23/64	6 1/16x1200	So.Chicago,Ill. U5
23/64	6⅛x840	Johnstown,Pa. B2
23/64	6¼x696	IndianaHarbor,Ind. I-2
23/64	6¼x708	Clairton,Pa. U5
23/64	6½x708	Clairton,Pa. U5
23/64	6½x1320	So.Chicago,Ill. U5
23/64	6¾x696	Clairton,Pa. U5
23/64	7x684	Clairton,Pa. U5
23/64	7x1056	Seattle B3
23/64	7x1320	So.Chicago,Ill. U5
23/64	7¼x684	Clairton,Pa. U5
23/64	7½x660	Clairton,Pa. U5
23/64	7½x1320	So.Chicago,Ill. U5
23/64	7¾x648	Clairton,Pa. U5
23/64	8x636	Clairton,Pa. U5
23/64	8x840	Johnstown,Pa. B2
23/64	8x924	Seattle B3
23/64	8x1320	So.Chicago,Ill. U5
23/64	8x—	SanFrancisco B3
23/64	8¼x636	Clairton,Pa. U5
23/64	8½x612	Clairton,Pa. U5
23/64	8½x1320	So.Chicago,Ill. U5
23/64	8¾x600	Clairton,Pa. U5
23/64	9x588	Clairton,Pa. U5
23/64	9x816	Seattle B3
23/64	9x1320	So.Chicago,Ill. U5
23/64	9¼x576	Clairton,Pa. U5
23/64	9½x564	Clairton,Pa. U5
23/64	9½x1320	So.Chicago,Ill. U5
23/64	9¾x564	Clairton,Pa. U5
23/64	10x552	Clairton,Pa. U5
23/64	10x732	Seattle B3
23/64	10x840	Johnstown,Pa. B2
23/64	10x1200	SparrowsPoint,Md. B2
23/64	10x1320	So.Chicago,Ill. U5
23/64	11x672	Seattle B3
23/64	11x1200	Munhall,Pa. U5
23/64	12x552	Seattle B3
23/64	12x720	Minnequa,Colo. C10
23/64	12x840	Johnstown,Pa. B2
23/64	12x1320	So.Chicago,Ill. U5
23/64	12x1440	SparrowsPoint,Md. B2
23/64	13x516	Seattle B3
23/64	13x1200	Munhall,Pa. U5
23/64	14x468	Seattle B3
23/64	14x840	Johnstown,Pa. B2
23/64	14x1320	So.Chicago,Ill. U5
23/64	14x1440	SparrowsPoint,Md. B2
23/64	15x444	Seattle B3
23/64	15x1200	Munhall,Pa. U5
23/64	16x456	Seattle B3
23/64	16x480	Fontana,Calif. K1
23/64	16x840	Johnstown,Pa. B2
23/64	16x1320	So.Chicago,Ill. U5
23/64	16x1440	SparrowsPoint,Md. B2
23/64	17x432	Seattle B3
23/64	17x1200	Munhall,Pa. U5
23/64	18x468	Seattle B3
23/64	18x840	Johnstown,Pa. B2
23/64	18x1320	So.Chicago,Ill. U5
23/64	18x1440	SparrowsPoint,Md. B2
23/64	19x432	Seattle B3
23/64	19x1200	Munhall,Pa. U5
23/64	20x480	Seattle B3
23/64	20x840	Johnstown,Pa. B2

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Plates, Universal

CONTINUED FROM PRECEDING PAGE

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
¼	20x1320	So.Chicago,Ill. U5
¼	20x1440	SparrowsPoint,Md. B2
¼	21x456	Seattle B3
¼	21x1200	Munhall,Pa. U5
¼	22x432	Seattle B3
¼	22x840	Johnstown,Pa. B2
¼	22x1320	So.Chicago,Ill. U5
¼	22x1440	SparrowsPoint,Md. B2
¼	23x1200	Munhall,Pa. U5
¼	24x840	Johnstown,Pa. B2
¼	24x1320	So.Chicago,Ill. U5
¼	24x1440	SparrowsPoint,Md. B2
¼	25x1200	Munhall,Pa. U5
¼	26x780	IndianaHarbor,Ind. I-2
¼	26x828	Johnstown,Pa. B2
¼	26x1320	So.Chicago,Ill. U5
¼	26x1440	SparrowsPoint,Md. B2
¼	27x1200	Munhall,Pa. U5
¼	28x828	Johnstown,Pa. B2
¼	28x1320	So.Chicago,Ill. U5
¼	28x1440	SparrowsPoint,Md. B2
¼	29x1200	Munhall,Pa. U5
¼	30x828	Johnstown,Pa. B2
¼	30x1520	So.Chicago,Ill. U5
¼	30x1440	SparrowsPoint,Md. B2
¼	31x1200	Munhall,Pa. U5
¼	32x828	Johnstown,Pa. B2
¼	32x1440	SparrowsPoint,Md. B2
¼	33x1200	Munhall,Pa. U5
¼	34x828	Johnstown,Pa. B2
¼	34x1440	SparrowsPoint,Md. B2
¼	36x828	Johnstown,Pa. B2
¼	36x1200	Munhall,Pa. U5
¼	36x1440	SparrowsPoint,Md. B2
¼	37x1200	Munhall,Pa. U5
¼	38x1440	SparrowsPoint,Md. B2
¼	39x1200	Munhall,Pa. U5
¼	40x1440	SparrowsPoint,Md. B2
¼	41x1200	Munhall,Pa. U5
¼	42x1440	SparrowsPoint,Md. B2
¼	43x1200	Munhall,Pa. U5
¼	44x1440	SparrowsPoint,Md. B2
¼	45x1200	Munhall,Pa. U5
¼	46x1440	SparrowsPoint,Md. B2
¼	47x1193	Munhall,Pa. U5
¼	48x1169	Munhall,Pa. U5
¼	48x1440	SparrowsPoint,Md. B2
¼	50x1440	SparrowsPoint,Md. B2
¼	52x1440	SparrowsPoint,Md. B2
¼	54x1440	SparrowsPoint,Md. B2
¼	56x1440	SparrowsPoint,Md. B2
¼	58x1440	SparrowsPoint,Md. B2
¼	60x480	SparrowsPoint,Md. B2
⅜	6½x1200	So.Chicago,Ill. U5
⅜	6½x1320	So.Chicago,Ill. U5
⅜	7x1320	So.Chicago,Ill. U5
⅜	7½x1320	So.Chicago,Ill. U5
⅜	8x1320	So.Chicago,Ill. U5
⅜	8½x1320	So.Chicago,Ill. U5
⅜	9x1320	So.Chicago,Ill. U5
⅜	9½x1320	So.Chicago,Ill. U5
⅜	10x1320	So.Chicago,Ill. U5
⅜	12x1320	So.Chicago,Ill. U5
⅜	14x1320	So.Chicago,Ill. U5
⅜	16x1320	So.Chicago,Ill. U5
⅜	18x1320	So.Chicago,Ill. U5
⅜	20x1320	So.Chicago,Ill. U5
⅜	22x1320	So.Chicago,Ill. U5
⅜	24x1320	So.Chicago,Ill. U5
⅜	26x1320	So.Chicago,Ill. U5
⅜	28x1320	So.Chicago,Ill. U5
⅜	30x1260	So.Chicago,Ill. U5
1	6½x1200	So.Chicago,Ill. U5
1	6⅝x720	Johnstown,Pa. B2
1	6¾x624	Clairton,Pa. U5
1	6¾x624	IndianaHarbor,Ind. I-2
1	6½x612	Clairton,Pa. U5
1	6½x780	IndianaHarbor,Ind. I-2
1	6½x1272	So.Chicago,Ill. U5
1	6⅝x600	Clairton,Pa. U5
1	6¾x780	IndianaHarbor,Ind. I-2
1	7x588	Clairton,Pa. U5
1	7x780	IndianaHarbor,Ind. I-2
1	7x924	Seattle B3
1	7x1320	So.Chicago,Ill. U5
1	7¼x588	Clairton,Pa. U5
1	7½x576	Clairton,Pa. U5
1	7½x780	IndianaHarbor,Ind. I-2
1	7½x1320	So.Chicago,Ill. U5
1	7⅝x564	Clairton,Pa. U5
1	8x552	Clairton,Pa. U5
1	8x720	Johnstown,Pa. B2
1	8x780	IndianaHarbor,Ind. I-2
1	8x804	Seattle B3
1	8x1320	So.Chicago,Ill. U5
1	8x—	SanFrancisco B3
1	8¼x552	Clairton,Pa. U5
1	8¼x540	Clairton,Pa. U5
1	8½x1320	So.Chicago,Ill. U5
1	8⅝x528	Clairton,Pa. U5
1	9x516	Clairton,Pa. U5
1	9x720	Seattle B3
1	9x780	IndianaHarbor,Ind. I-2
1	9x1320	So.Chicago,Ill. U5
1	9¼x516	Clairton,Pa. U5
1	9½x504	Clairton,Pa. U5
1	9½x1320	So.Chicago,Ill. U5

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
1	9¾x492	Clairton,Pa. U5
1	10x480	Clairton,Pa. U5
1	10x648	Seattle B3
1	10x732	Johnstown,Pa. B2
1	10x780	IndianaHarbor,Ind. I-2
1	10x1104	SparrowsPoint,Md. B2
1	10x1320	So.Chicago,Ill. U5
1	11x588	Seattle B3
1	11x780	IndianaHarbor,Ind. I-2
1	11x1200	Munhall,Pa. U5
1	12x480	Seattle B3
1	12x720	Minnequa,Colo. C10
1	12x732	Johnstown,Pa. B2
1	12x1320	So.Chicago,Ill. U5
1	12x1440	SparrowsPoint,Md. B2
1	12 to 26 x 780	Ind.Harbor,Ind. I-2
1	13x444	Seattle B3
1	13x1200	Munhall,Pa. U5
1	14x420	Seattle B3
1	14x732	Johnstown,Pa. B2
1	14x1308	So.Chicago,Ill. U5
1	14x1440	SparrowsPoint,Md. B2
1	15x384	Seattle B3
1	15x1200	Munhall,Pa. U5
1	16x408	Seattle B3
1	16x480	Fontana,Calif. K1
1	16x732	Johnstown,Pa. B2
1	16x1296	So.Chicago,Ill. U5
1	16x1440	SparrowsPoint,Md. B2
1	17x384	Seattle B3
1	17x1200	Munhall,Pa. U5
1	18x408	Seattle B3
1	18x732	Johnstown,Pa. B2
1	18x1290	So.Chicago,Ill. U5
1	18x1440	SparrowsPoint,Md. B2
1	19x384	Seattle B3
1	19x1200	Munhall,Pa. U5
1	20x408	Seattle B3
1	20x732	Johnstown,Pa. B2
1	20x1284	So.Chicago,Ill. U5
1	20x1440	SparrowsPoint,Md. B2
1	21x396	Seattle B3
1	21x1200	Munhall,Pa. U5
1	22x384	Seattle B3
1	22x732	Johnstown,Pa. B2
1	22x1278	So.Chicago,Ill. U5
1	22x1440	SparrowsPoint,Md. B2
1	23x1200	Munhall,Pa. U5
1	24x732	Johnstown,Pa. B2
1	24x1272	So.Chicago,Ill. U5
1	24x1440	SparrowsPoint,Md. B2
1	25x1200	Munhall,Pa. U5
1	26x732	Johnstown,Pa. B2
1	26x1266	So.Chicago,Ill. U5
1	26x1440	SparrowsPoint,Md. B2
1	27x1200	Munhall,Pa. U5
1	28x732	Johnstown,Pa. B2
1	28x1266	So.Chicago,Ill. U5
1	28x1440	SparrowsPoint,Md. B2
1	29x1200	Munhall,Pa. U5
1	30x732	Johnstown,Pa. B2
1	30x1182	So.Chicago,Ill. U5
1	30x1440	SparrowsPoint,Md. B2
1	31x1200	Munhall,Pa. U5
1	32x732	Johnstown,Pa. B2
1	32x1440	SparrowsPoint,Md. B2
1	33x1200	Munhall,Pa. U5
1	34x732	Johnstown,Pa. B2
1	34x1440	SparrowsPoint,Md. B2
1	36x732	Johnstown,Pa. B2
1	36x1200	Munhall,Pa. U5
1	36x1440	SparrowsPoint,Md. B2
1	37x1200	Munhall,Pa. U5
1	38x1440	SparrowsPoint,Md. B2
1	39x1200	Munhall,Pa. U5
1	40x1440	SparrowsPoint,Md. B2
1	41x1197	Munhall,Pa. U5
1	42x1440	SparrowsPoint,Md. B2
1	43x1142	Munhall,Pa. U5
1	44x1440	SparrowsPoint,Md. B2
1	45x1091	Munhall,Pa. U5
1	46x1440	SparrowsPoint,Md. B2
1	47x1044	Munhall,Pa. U5
1	48x1023	Munhall,Pa. U5
1	48x1440	SparrowsPoint,Md. B2
1	50x1440	SparrowsPoint,Md. B2
1	52x1440	SparrowsPoint,Md. B2
1	54x1440	SparrowsPoint,Md. B2
1	56x1440	SparrowsPoint,Md. B2
1	58x1440	SparrowsPoint,Md. B2
1	60x480	SparrowsPoint,Md. B2
1¼	6½x1080	So.Chicago,Ill. U5
1¼	6¼x660	Johnstown,Pa. B2
1¼	6¼x588	Clairton,Pa. U5
1¼	6½x576	Clairton,Pa. U5
1¼	6½x1128	So.Chicago,Ill. U5
1¼	6⅝x576	Clairton,Pa. U5
1¼	7x564	Clairton,Pa. U5
1¼	7x804	Seattle B3
1¼	7x1164	So.Chicago,Ill. U5
1¼	7¼x540	Clairton,Pa. U5
1¼	7½x516	Clairton,Pa. U5
1¼	7½x1212	So.Chicago,Ill. U5
1¼	7⅝x504	Clairton,Pa. U5
1¼	8x480	Clairton,Pa. U5
1¼	8x660	Johnstown,Pa. B2
1¼	8x720	Seattle B3

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
1⅛	8x1200	So.Chicago,Ill. U5
1⅛	8¼x468	Clairton,Pa. U5
1⅛	8½x456	Clairton,Pa. U5
1⅛	8½x1200	So.Chicago,Ill. U5
1⅛	8¾x444	Cairton,Pa. U5
1⅛	9x444	Clairton,Pa. U5
1⅛	9x648	Seattle B3
1⅛	9x1200	So.Chicago,Ill. U5
1⅛	9¼x432	Clairton,Pa. U5
1⅛	9½x420	Clairton,Pa. U5
1⅛	9½x1188	So.Chicago,Ill. U5
1⅛	9⅝x420	Clairton,Pa. U5
1⅛	10x420	Clairton,Pa. U5
1⅛	10x576	Seattle B3
1⅛	10x660	Johnstown,Pa. B2
1⅛	10x984	SparrowsPoint,Md. B2
1⅛	10x1188	So.Chicago,Ill. U5
1⅛	11x468	Seattle B3
1⅛	11x1200	Munhall,Pa. U5
1⅛	12x528	Seattle B3
1⅛	12x660	Johnstown,Pa. B2
1⅛	12x720	Minnequa,Colo. C10
1⅛	12x1164	So.Chicago,Ill. U5
1⅛	12x1440	SparrowsPoint,Md. B2
1⅛	13x396	Seattle B3
1⅛	13x1200	Munhall,Pa. U5
1⅛	14x372	Seattle B3
1⅛	14x660	Johnstown,Pa. B2
1⅛	14x1152	So.Chicago,Ill. U5
1⅛	14x1440	SparrowsPoint,Md. B2
1⅛	15x348	Seattle B3
1⅛	15x1168	Munhall,Pa. U5
1⅛	16x360	Seattle B3
1⅛	16x660	Johnstown,Pa. B2
1⅛	16x1140	So.Chicago,Ill. U5
1⅛	16x1440	SparrowsPoint,Md. B2
1⅛	17x336	Seattle B3
1⅛	17x1200	Munhall,Pa. U5
1⅛	18x360	Seattle B3
1⅛	18x660	Johnstown,Pa. B2
1⅛	18x1128	So.Chicago,Ill. U5
1⅛	18x1440	SparrowsPoint,Md. B2
1⅛	19x336	Seattle B3
1⅛	19x1200	Munhall,Pa. U5
1⅛	20x372	Seattle B3
1⅛	20x660	Johnstown,Pa. B2
1⅛	20x1128	So.Chicago,Ill. U5
1⅛	20x1440	SparrowsPoint,Md. B2
1⅛	21x348	Seattle B3
1⅛	21x1200	Munhall,Pa. U5
1⅛	22x336	Seattle B3
1⅛	22x660	Johnstown,Pa. B2
1⅛	22x1128	So.Chicago,Ill. U5
1⅛	22x1440	SparrowsPoint,Md. B2
1⅛	23x1200	Munhall,Pa. U5
1⅛	24x660	Johnstown,Pa. B2
1⅛	24x1116	So.Chicago,Ill. U5
1⅛	24x1440	SparrowsPoint,Md. B2
1⅛	25x1200	Munhall,Pa. U5
1⅛	26x660	Johnstown,Pa. B2
1⅛	26x1116	So.Chicago,Ill. U5
1⅛	26x1440	SparrowsPoint,Md. B2
1⅛	27x1200	Munhall,Pa. U5
1⅛	28x660	Johnstown,Pa. B2
1⅛	28x1116	So.Chicago,Ill. U5
1⅛	28x1440	SparrowsPoint,Md. B2
1⅛	29x1200	Munhall,Pa. U5
1⅛	30x660	Johnstown,Pa. B2
1⅛	30x1032	So.Chicago,Ill. U5
1⅛	30x1440	SparrowsPoint,Md. B2
1⅛	31x1200	Munhall,Pa. U5
1⅛	32x660	Johnstown,Pa. B2
1⅛	32x1440	SparrowsPoint,Md. B2
1⅛	33x1200	Munhall,Pa. U5
1⅛	34x660	Johnstown,Pa. B2
1⅛	34x1440	SparrowsPoint,Md. B2
1⅛	36x660	Johnstown,Pa. B2
1⅛	36x1200	Munhall,Pa. U5
1⅛	36x1440	SparrowsPoint,Md. B2
1⅛	37x1180	Munhall,Pa. U5
1⅛	38x1440	SparrowsPoint,Md. B2
1⅛	39x1119	Munhall,Pa. U5
1⅛	40x1440	SparrowsPoint,Md. B2
1⅛	41x1064	Munhall,Pa. U5
1⅛	42x1440	SparrowsPoint,Md. B2
1⅛	43x1014	Munhall,Pa. U5
1⅛	44x1440	SparrowsPoint,Md. B2
1⅛	45x970	Munhall,Pa. U5
1⅛	46x1440	SparrowsPoint,Md. B2
1⅛	47x927	Munhall,Pa. U5
1⅛	48x910	Munhall,Pa. U5
1⅛	48x1440	SparrowsPoint,Md. B2
1⅛	50x1440	SparrowsPoint,Md. B2
1⅛	52x1440	SparrowsPoint,Md. B2
1⅛	54x1440	SparrowsPoint,Md. B2
1⅛	56x1440	SparrowsPoint,Md. B2
1⅛	58x1440	SparrowsPoint,Md. B2
1⅛	60x480	SparrowsPoint,Md. B2
1¼	6½x972	So.Chicago,Ill. U5
1¼	6¼x576	Johnstown,Pa. B2
1¼	6¼x540	Clairton,Pa. U5
1¼	6¼x576	IndianaHarbor,Ind. I-2
1¼	6½x528	Clairton,Pa. U5
1¼	6½x624	IndianaHarbor,Ind. I-2
1¼	6½x1002	So.Chicago,Ill. U5
1¼	6⅝x516	Clairton,Pa. U5
1¼	6¾x624	IndianaHarbor,Ind. I-2

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Plates, Universal

CONTINUED FROM PRECEDING PAGE

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
1¼	7x504	Clairton,Pa. U5
1¼	7x624	IndianaHarbor,Ind. I-2
1¼	7x732	Seattle B3
1¼	7x1044	So.Chicago,Ill. U5
1¼	7¼x480	Clairton,Pa. U5
1¼	7½x456	Clairton,Pa. U5
1¼	7½x648	IndianaHarbor,Ind. I-2
1¼	7½x1092	So.Chicago,Ill. U5
1¼	7⅝x444	Clairton,Pa. U5
1¼	8x432	Clairton,Pa. U5
1¼	8x576	Johnstown,Pa. B2
1¼	8x648	Seattle B3
1¼	8x720	IndianaHarbor,Ind. I-2
1¼	8x1080	So.Chicago,Ill. U5
1¼	8¼x420	Clairton,Pa. U5
1¼	8½x408	Clairton,Pa. U5
1¼	8½x1080	So.Chicago,Ill. U5
1¼	8⅝x396	Clairton,Pa. U5
1¼	9x396	Clairton,Pa. U5
1¼	9x576	Seattle B3
1¼	9x720	IndianaHarbor,Ind. I-2
1¼	9x1068	So.Chicago,Ill. U5
1¼	9¼x384	Clairton,Pa. U5
1¼	9½x384	Clairton,Pa. U5
1¼	9½x1068	So.Chicago,Ill. U5
1¼	9⅝x372	Clairton,Pa. U5
1¼	10x372	Clairton,Pa. U5
1¼	10x516	Seattle B3
1¼	10x576	Johnstown,Pa. B2
1¼	10x600	IndianaHarbor,Ind. I-2
1¼	10x900	SparrowsPoint,Md. B2
1¼	10x1068	So.Chicago,Ill. U5
1¼	11x420	Seattle B3
1¼	11x552	IndianaHarbor,Ind. I-2
1¼	11x1200	Munhall,Pa. U5
1¼	12x384	Seattle B3
1¼	12x576	Johnstown,Pa. B2
1¼	12x600	Minnequa,Colo. C10
1¼	12x1044	So.Chicago,Ill. U5
1¼	12x1440	SparrowsPoint,Md. B2
1¼	12 thru 26 x 576	Ind.Harbor,Ind. I-2
1¼	13x360	Seattle B3
1¼	13x1200	Munhall,Pa. U5
1¼	14x336	Seattle B3
1¼	14x576	Johnstown,Pa. B2
1¼	14x1032	So.Chicago,Ill. U5
1¼	14x1440	SparrowsPoint,Md. B2
1¼	15x312	Seattle B3
1¼	15x1052	Munhall,Pa. U5
1¼	16x324	Seattle B3
1¼	16x480	Fontana,Calif. K1
1¼	16x576	Johnstown,Pa. B2
1¼	16x1032	So.Chicago,Ill. U5
1¼	16x1440	SparrowsPoint,Md. B2
1¼	17x300	Seattle B3
1¼	17x1200	Munhall,Pa. U5
1¼	18x324	Seattle B3
1¼	18x576	Johnstown,Pa. B2
1¼	18x1020	So.Chicago,Ill. U5
1¼	18x1440	SparrowsPoint,Md. B2
1¼	19x300	Seattle B3
1¼	19x1200	Munhall,Pa. U5
1¼	20x336	Seattle B3
1¼	20x576	Johnstown,Pa. B2
1¼	20x1020	So.Chicago,Ill. U5
1¼	20x1440	SparrowsPoint,Md. B2
1¼	21x312	Seattle B3
1¼	21x1200	Munhall,Pa. U5
1¼	22x300	Seattle B3
1¼	22x576	Johnstown,Pa. B2
1¼	22x1008	So.Chicago,Ill. U5
1¼	22x1440	SparrowsPoint,Md. B2
1¼	23x1200	Munhall,Pa. U5
1¼	24x576	Johnstown,Pa. B2
1¼	24x1008	So.Chicago,Ill. U5
1¼	24x1440	SparrowsPoint,Md. B2
1¼	25x1200	Munhall,Pa. U5
1¼	26x576	Johnstown,Pa. B2
1¼	26x1008	So.Chicago,Ill. U5
1¼	26x1440	SparrowsPoint,Md. B2
1¼	27x1200	Munhall,Pa. U5
1¼	28x576	Johnstown,Pa. B2
1¼	28x996	So.Chicago,Ill. U5
1¼	28x1440	SparrowsPoint,Md. B2
1¼	29x1200	Munhall,Pa. U5
1¼	30x576	Johnstown,Pa. B2
1¼	30x936	So.Chicago,Ill. U5
1¼	30x1440	SparrowsPoint,Md. B2
1¼	31x1200	Munhall,Pa. U5
1¼	32x576	Johnstown,Pa. B2
1¼	32x1440	SparrowsPoint,Md. B2
1¼	33x1090	Munhall,Pa. U5
1¼	34x576	Johnstown,Pa. B2
1¼	34x1440	SparrowsPoint,Md. B2
1¼	36x576	Johnstown,Pa. B2
1¼	36x1091	Munhall,Pa. U5
1¼	36x1440	SparrowsPoint,Md. B2
1¼	37x1061	Munhall,Pa. U5
1¼	38x1440	SparrowsPoint,Md. B2
1¼	39x1006	Munhall,Pa. U5
1¼	40x1440	SparrowsPoint,Md. B2
1¼	41x957	Munhall,Pa. U5
1¼	42x1440	SparrowsPoint,Md. B2
1¼	43x913	Munhall,Pa. U5
1¼	44x1380	SparrowsPoint,Md. B2
1¼	45x975	Munhall,Pa. U5
1¼	46x1380	SparrowsPoint,Md. B2
1¼	47x855	Munhall,Pa. U5
1¼	48x819	Munhall,Pa. U5
1¼	48x1440	SparrowsPoint,Md. B2
1¼	50x1440	SparrowsPoint,Md. B2
1¼	52x1440	SparrowsPoint,Md. B2
1¼	54x1440	SparrowsPoint,Md. B2
1¼	56x1440	SparrowsPoint,Md. B2
1¼	58x1440	SparrowsPoint,Md. B2
1¼	60x480	SparrowsPoint,Md. B2
1⅛	6½x516	Clairton,Pa. U5
1⅛	6½x504	Clairton,Pa. U5
1⅛	6¾x492	Clairton,Pa. U5
1⅛	7x468	Clairton,Pa. U5
1⅛	7¼x456	Clairton,Pa. U5
1⅛	7½x432	Clairton,Pa. U5
1⅛	7⅝x432	Clairton,Pa. U5
1⅛	8x408	Clairton,Pa. U5
1⅛	8¼x396	Clairton,Pa. U5
1⅛	8½x384	Clairton,Pa. U5
1⅛	8⅝x372	Clairton,Pa. U5
1⅛	9x372	Clairton,Pa. U5
1⅛	9¼x372	Clairton,Pa. U5
1⅛	9½x372	Clairton,Pa. U5
1⅛	9⅝x360	Clairton,Pa. U5
1⅛	10x360	Clairton,Pa. U5
1⅜	6½x888	So.Chicago,Ill. U5
1⅜	6¾x528	Johnstown,Pa. B2
1⅜	6¾x480	Clairton,Pa. U5
1⅜	6½x468	Clairton,Pa. U5
1⅜	6½x924	So.Chicago,Ill. U5
1⅜	6⅝x468	Clairton,Pa. U5
1⅜	7x444	Clairton,Pa. U5
1⅜	7x672	Seattle B3
1⅜	7x948	So.Chicago,Ill. U5
1⅜	7¼x432	Clairton,Pa. U5
1⅜	7½x420	Clairton,Pa. U5
1⅜	7½x984	So.Chicago,Ill. U5
1⅜	7¾x396	Clairton,Pa. U5
1⅜	8x384	Clairton,Pa. U5
1⅜	8x528	Johnstown,Pa. B2
1⅜	8x600	Seattle B3
1⅜	8x984	So.Chicago,Ill. U5
1⅜	8¼x372	Clairton,Pa. U5
1⅜	8½x372	Clairton,Pa. U5
1⅜	8½x972	So.Chicago,Ill. U5
1⅜	8⅝x360	Clairton,Pa. U5
1⅜	9x360	Clairton,Pa. U5
1⅜	9x528	Seattle B3
1⅜	9x972	So.Chicago,Ill. U5
1⅜	9¼x360	Clairton,Pa. U5
1⅜	9½x360	Clairton,Pa. U5
1⅜	9½x972	So.Chicago,Ill. U5
1⅜	9⅝x348	Clairton,Pa. U5
1⅜	10x348	Clairton,Pa. U5
1⅜	10x480	Seattle B3
1⅜	10x528	Johnstown,Pa. B2
1⅜	10x816	SparrowsPoint,Md. B2
1⅜	10x960	So.Chicago,Ill. U5
1⅜	11x384	Seattle B3
1⅜	11x1200	Munhall,Pa. U5
1⅜	12x408	Seattle B3
1⅜	12x528	Johnstown,Pa. B2
1⅜	12x600	Minnequa,Colo. C10
1⅜	12x948	So.Chicago,Ill. U5
1⅜	12x1440	SparrowsPoint,Md. B2
1⅜	13x384	Seattle B3
1⅜	13x1104	Munhall,Pa. U5
1⅜	14x300	Seattle B3
1⅜	14x528	Johnstown,Pa. B2
1⅜	14x936	So.Chicago,Ill. U5
1⅜	14x1440	SparrowsPoint,Md. B2
1⅜	15x288	Seattle B3
1⅜	15x956	Munhall,Pa. U5
1⅜	16x288	Seattle B3
1⅜	16x528	Johnstown,Pa. B2
1⅜	16x936	So.Chicago,Ill. U5
1⅜	16x1440	SparrowsPoint,Md. B2
1⅜	17x276	Seattle B3
1⅜	17x1200	Munhall,Pa. U5
1⅜	18x300	Seattle B3
1⅜	18x528	Johnstown,Pa. B2
1⅜	18x924	So.Chicago,Ill. U5
1⅜	18x1440	SparrowsPoint,Md. B2
1⅜	19x276	Seattle B3
1⅜	19x1200	Munhall,Pa. U5
1⅜	20x300	Seattle B3
1⅜	20x528	Johnstown,Pa. B2
1⅜	20x924	So.Chicago,Ill. U5
1⅜	20x1440	SparrowsPoint,Md. B2
1⅜	21x288	Seattle B3
1⅜	21x1200	Munhall,Pa. U5
1⅜	22x276	Seattle B3
1⅜	22x528	Johnstown,Pa. B2
1⅜	22x912	So.Chicago,Ill. U5
1⅜	22x1440	SparrowsPoint,Md. B2
1⅜	23x1200	Munhall,Pa. U5
1⅜	24x528	Johnstown,Pa. B2
1⅜	24x912	So.Chicago,Ill. U5
1⅜	24x1440	SparrowsPoint,Md. B2
1⅜	25x1200	Munhall,Pa. U5
1⅜	26x528	Johnstown,Pa. B2
1⅜	26x912	So.Chicago,Ill. U5
1⅜	26x1440	SparrowsPoint,Md. B2
1⅜	27x1200	Munhall,Pa. U5
1⅜	28x528	Johnstown,Pa. B2
1⅜	28x912	So.Chicago,Ill. U5
1⅜	28x1440	SparrowsPoint,Md. B2
1⅜	29x1200	Munhall,Pa. U5
1⅜	30x528	Johnstown,Pa. B2
1⅜	30x936	So.Chicago,Ill. U5
1⅜	30x1440	SparrowsPoint,Md. B2
1⅜	32x528	Johnstown,Pa. B2
1⅜	32x1440	SparrowsPoint,Md. B2
1⅜	33x1082	Munhall,Pa. U5
1⅜	34x528	Johnstown,Pa. B2
1⅜	34x1440	SparrowsPoint,Md. B2
1⅜	36x528	Johnstown,Pa. B2
1⅜	36x991	Munhall,Pa. U5
1⅜	36x1440	SparrowsPoint,Md. B2
1⅜	37x965	Munhall,Pa. U5
1⅜	38x1440	SparrowsPoint,Md. B2
1⅜	39x915	Munhall,Pa. U5
1⅜	40x1380	SparrowsPoint,Md. B2
1⅜	41x870	Munhall,Pa. U5
1⅜	42x1380	SparrowsPoint,Md. B2
1⅜	43x830	Munhall,Pa. U5
1⅜	44x1260	SparrowsPoint,Md. B2
1⅜	45x794	Munhall,Pa. U5
1⅜	46x1260	SparrowsPoint,Md. B2
1⅜	47x759	Munhall,Pa. U5
1⅜	48x1320	SparrowsPoint,Md. B2
1⅜	50x1320	SparrowsPoint,Md. B2
1⅜	52x1320	SparrowsPoint,Md. B2
1⅜	54x1320	SparrowsPoint,Md. B2
1⅜	56x1440	SparrowsPoint,Md. B2
1⅜	58x1440	SparrowsPoint,Md. B2
1⅜	60x480	SparrowsPoint,Md. B2
1½	6½x804	So.Chicago,Ill. U5
1½	6¼x480	Johnstown,Pa. B2
1½	6¼x468	Clairton,Pa. U5
1½	6½x480	IndianaHarbor,Ind. I-2
1½	6½x444	Clairton,Pa. U5
1½	6½x528	IndianaHarbor,Ind. I-2
1½	6½x840	So.Chicago,Ill. U5
1½	6⅝x432	Clairton,Pa. U5
1½	6⅝x528	IndianaHarbor,Ind. I-2
1½	7x408	Clairton,Pa. U5
1½	7x612	Seattle B3
1½	7x624	IndianaHarbor,Ind. I-2
1½	7x864	So.Chicago,Ill. U5
1½	7¼x408	Clairton,Pa. U5
1½	7½x384	Clairton,Pa. U5
1½	7½x648	IndianaHarbor,Ind. I-2
1½	7½x900	So.Chicago,Ill. U5
1½	7¾x372	Clairton,Pa. U5
1½	8x360	Clairton,Pa. U5
1½	8x480	Johnstown,Pa. B2
1½	8x540	Seattle B3
1½	8x720	IndianaHarbor,Ind. I-2
1½	8x900	So.Chicago,Ill. U5
1½	8¼x348	Clairton,Pa. U5
1½	8½x336	Clairton,Pa. U5
1½	8½x900	So.Chicago,Ill. U5
1½	8⅝x336	Clairton,Pa. U5
1½	9x336	Clairton,Pa. U5
1½	9x480	Seattle B3
1½	9x720	IndianaHarbor,Ind. I-2
1½	9x888	So.Chicago,Ill. U5
1½	9¼x324	Clairton,Pa. U5
1½	9½x324	Clairton,Pa. U5
1½	9½x888	So.Chicago,Ill. U5
1½	9⅝x312	Clairton,Pa. U5
1½	10x312	Clairton,Pa. U5
1½	10x432	Seattle B3
1½	10x480	Johnstown,Pa. B2
1½	10x600	IndianaHarbor,Ind. I-2
1½	10x744	SparrowsPoint,Md. B2
1½	10x888	So.Chicago,Ill. U5
1½	11x348	Seattle B3
1½	11x552	IndianaHarbor,Ind. I-2
1½	11x1195	Munhall,Pa. U5
1½	12x324	Seattle B3
1½	12x480	Johnstown,Pa. B2
1½	12x600	Minnequa,Colo. C10
1½	12x864	So.Chicago,Ill. U5
1½	12x1440	SparrowsPoint,Md. B2
1½	12 thru 26 x 576	Ind.Harbor,Ind. I-2
1½	13x300	Seattle B3
1½	13x1012	Munhall,Pa. U5
1½	14x276	Seattle B3
1½	14x480	Johnstown,Pa. B2
1½	14x864	So.Chicago,Ill. U5
1½	14x1440	SparrowsPoint,Md. B2
1½	15x264	Seattle B3
1½	15x876	Munhall,Pa. U5
1½	16x264	Seattle B3
1½	16x480	Fontana,Calif. K1
1½	16x480	Johnstown,Pa. B2
1½	16x852	So.Chicago,Ill. U5
1½	16x1440	SparrowsPoint,Md. B2
1½	17x252	Seattle B3
1½	17x1152	Munhall,Pa. U5
1½	18x276	Seattle B3
1½	18x480	Johnstown,Pa. B2
1½	18x840	So.Chicago,Ill. U5

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Plates, Universal

CONTINUED FROM PRECEDING PAGE

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
1	18x1440	SparrowsPoint,Md. B2
1	19x252	Seattle B3
1	19x1139	Munhall,Pa. U5
1	20x276	Seattle B3
1	20x480	Johnstown,Pa. B2
1	20x840	So.Chicago,Ill. U5
1	20x1440	SparrowsPoint,Md. B2
1	21x264	Seattle B3
1	21x1129	Munhall,Pa. U5
1	22x252	Seattle B3
1	22x480	Johnstown,Pa. B2
1	22x840	So.Chicago,Ill. U5
1	22x1440	SparrowsPoint,Md. B2
1	23x1120	Munhall,Pa. U5
1	24x480	Johnstown,Pa. B2
1	24x828	So.Chicago,Ill. U5
1	24x1440	SparrowsPoint,Md. B2
1	25x1114	Munhall,Pa. U5
1	26x480	Johnstown,Pa. B2
1	26x828	So.Chicago,Ill. U5
1	26x1440	SparrowsPoint,Md. B2
1	27x1107	Munhall,Pa. U5
1	28x480	Johnstown,Pa. B2
1	28x828	So.Chicago,Ill. U5
1	28x1440	SparrowsPoint,Md. B2
1	29x1102	Munhall,Pa. U5
1	30x480	Johnstown,Pa. B2
1	30x792	So.Chicago,Ill. U5
1	30x1440	SparrowsPoint,Md. B2
1	31x1056	Munhall,Pa. U5
1	32x480	Johnstown,Pa. B2
1	32x1440	SparrowsPoint,Md. B2
1	33x991	Munhall,Pa. U5
1	34x480	Johnstown,Pa. B2
1	34x1440	SparrowsPoint,Md. B2
1	36x480	Johnstown,Pa. B2
1	36x908	Munhall,Pa. U5
1	36x1380	SparrowsPoint,Md. B2
1	37x894	Munhall,Pa. U5
1	38x1380	SparrowsPoint,Md. B2
1	39x838	Munhall,Pa. U5
1	40x1260	SparrowsPoint,Md. E2
1	41x797	Munhall,Pa. U5
1	42x1260	SparrowsPoint,Md. B2
1	43x761	Munhall,Pa. U5
1	44x1140	SparrowsPoint,Md. B2
1	45x726	Munhall,Pa. U5
1	46x1140	SparrowsPoint,Md. B2
1	47x696	Munhall,Pa. U5
1	48x1200	SparrowsPoint,Md. B2
1	50x1200	SparrowsPoint,Md. B2
1	52x1200	SparrowsPoint,Md. B2
1	54x1200	SparrowsPoint,Md. B2
1	56x1320	SparrowsPoint,Md. B2
1	58x1320	SparrowsPoint,Md. B2
1	60x480	SparrowsPoint,Md. B2
1.5626 to 2.125	over 6 to 6½ x 480	Youngstn U5
1⅛	6 1/16x744	So.Chicago,Ill. U5
1⅛	6¼x444	Johnstown,Pa. B2
1⅛	6¼x432	Clairton,Pa. U5
1⅛	6½x420	Clairton,Pa. U5
1⅛	6½x756	So.Chicago,Ill. U5
1⅛	6¾x396	Clairton,Pa. U5
1⅛	7x384	Clairton,Pa. U5
1⅛	7x564	Seattle B3
1⅛	7x792	So.Chicago,Ill. U5
1⅛	7¼x372	Clairton,Pa. U5
1⅛	7½x360	Clairton,Pa. U5
1⅛	7½x828	So.Chicago,Ill. U5
1⅛	7¾x348	Clairton,Pa. U5
1⅛	8x336	Clairton,Pa. U5
1⅛	8x444	Johnstown,Pa. B2
1⅛	8x492	Seattle B3
1⅛	8x828	So.Chicago,Ill. U5
1⅛	8¼x324	Clairton,Pa. U5
1⅛	8½x312	Clairton,Pa. U5
1⅛	8½x816	So.Chicago,Ill. U5
1⅛	8¾x312	Clairton,Pa. U5
1⅛	9x300	Clairton,Pa. U5
1⅛	9x816	So.Chicago,Ill. U5
1⅛	9¼x300	Clairton,Pa. U5
1⅛	9½x300	Clairton,Pa. U5
1⅛	9½x816	So.Chicago,Ill. U5
1⅛	9¾x288	Clairton,Pa. U5
1⅛	10x288	Clairton,Pa. U5
1⅛	10x444	Johnstown,Pa. B2
1⅛	10x672	SparrowsPoint,Md. B2
1⅛	10x816	So.Chicago,Ill. U5
1⅛	11x1103	Munhall,Pa. U5
1⅛	12x444	Johnstown,Pa. B2
1⅛	12x600	Minnequa,Colo. C10
1⅛	12x804	So.Chicago,Ill. U5
1⅛	12x1440	SparrowsPoint, Md. B2
1⅛	13x934	Munhall,Pa. U5
1⅛	14x444	Johnstown,Pa. B2
1⅛	14x792	So.Chicago,Ill. U5
1⅛	14x1440	SparrowsPoint,Md. B2
1⅛	15x803	Munhall,Pa. U5
1⅛	16x444	Johnstown,Pa. B2
1⅛	16x780	So.Chicago,Ill. U5
1⅛	16x1320	SparrowsPoint,Md. B2
1⅛	17x1063	Munhall,Pa. U5
1⅛	18x444	Johnstown,Pa. B2
1⅛	18x780	So.Chicago,Ill. U5
1⅛	18x1320	SparrowsPoint,Md. B2
1⅛	19x1051	Munhall,Pa. U5
1⅛	20x444	Johnstown,Pa. B2
1⅛	20x780	So.Chicago,Ill. U5
1⅛	20x1440	SparrowsPoint,Md. B2
1⅛	21x1042	Munhall,Pa. U5
1⅛	22x444	Johnstown,Pa. B2
1⅛	22x768	So.Chicago,Ill. U5
1⅛	22x1440	SparrowsPoint,Md. B2
1⅛	23x1034	Munhall,Pa. U5
1⅛	24x444	Johnstown,Pa. B2
1⅛	24x768	So.Chicago,Ill. U5
1⅛	24x1440	SparrowsPoint,Md. B2
1⅛	25x1028	Munhall,Pa. U5
1⅛	26x444	Johnstown,Pa. B2
1⅛	26x768	So.Chicago,Ill. U5
1⅛	26x1440	SparrowsPoint,Md. B2
1⅛	27x1022	Munhall,Pa. U5
1⅛	28x444	Johnstown,Pa. B2
1⅛	28x768	So.Chicago,Ill. U5
1⅛	28x1440	SparrowsPoint,Md. B2
1⅛	29x1018	Munhall,Pa. U5
1⅛	30x444	Johnstown,Pa. B2
1⅛	30x714	So.Chicago,Ill. U5
1⅛	30x1440	SparrowsPoint,Md. B2
1⅛	31x974	Munhall,Pa. U5
1⅛	32x444	Johnstown,Pa. B2
1⅛	32x1440	SparrowsPoint,Md. B2
1⅛	33x915	Munhall,Pa. U5
1⅛	34x444	Johnstown,Pa. B2
1⅛	34x1440	SparrowsPoint,Md. B2
1⅛	36x444	Johnstown,Pa. B2
1⅛	36x838	Munhall,Pa. U5
1⅛	36x1260	SparrowsPoint,Md. B2
1⅛	37x816	Munhall,Pa. U5
1⅛	38x1260	SparrowsPoint,Md. B2
1⅛	39x775	Munhall,Pa. U5
1⅛	40x1140	SparrowsPoint,Md. B2
1⅛	41x736	Munhall,Pa. U5
1⅛	42x1140	SparrowsPoint,Md. B2
1⅛	43x702	Munhall,Pa. U5
1⅛	44x1080	SparrowsPoint,Md. B2
1⅛	45x671	Munhall,Pa. U5
1⅛	46x1080	SparrowsPoint,Md. B2
1⅛	47x643	Munhall,Pa. U5
1⅛	48x1140	SparrowsPoint,Md. B2
1⅛	50x1140	SparrowsPoint,Md. B2
1⅛	52x1140	SparrowsPoint,Md. B2
1⅛	54x1140	SparrowsPoint,Md. B2
1⅛	56x1200	SparrowsPoint,Md. B2
1⅛	58x1200	SparrowsPoint,Md. B2
1¼	6 1/16x684	So.Chicago,Ill. U5
1¼	6¼x408	Johnstown,Pa. B2
1¼	6¼x396	Clairton,Pa. U5
1¼	6¼x420	IndianaHarbor,Ind. I-2
1¼	6½x384	Clairton,Pa. U5
1¼	6½x432	IndianaHarbor,Ind. I-2
1¼	6½x708	So.Chicago,Ill. U5
1¼	6¾x372	Clairton,Pa. U5
1¼	6¾x432	IndianaHarbor,Ind. I-2
1¼	7x360	Clairton,Pa. U5
1¼	7x528	Seattle B3
1¼	7x540	IndianaHarbor,Ind. I-2
1¼	7x732	So.Chicago,Ill. U5
1¼	7¼x336	Clairton,Pa. U5
1¼	7½x324	Clairton,Pa. U5
1¼	7½x540	IndianaHarbor,Ind. I-2
1¼	7½x768	So.Chicago,Ill. U5
1¼	7¾x312	Clairton,Pa. U5
1¼	8x300	Clairton,Pa. U5
1¼	8x408	Johnstown,Pa. B2
1¼	8x456	Seattle B3
1¼	8x624	IndianaHarbor,Ind. I-2
1¼	8x768	So.Chicago,Ill. U5
1¼	8¼x288	Clairton,Pa. U5
1¼	8½x288	Clairton,Pa. U5
1¼	8½x756	So.Chicago,Ill. U5
1¼	8¾x276	Clairton,Pa. U5
1¼	9x276	Clairton,Pa. U5
1¼	9x624	IndianaHarbor,Ind. I-2
1¼	9x756	So.Chicago,Ill. U5
1¼	9¼x276	Clairton,Pa. U5
1¼	9½x276	Clairton,Pa. U5
1¼	9½x756	So.Chicago,Ill. U5
1¼	9¾x264	Clairton,Pa. U5
1¼	10x264	Clairton,Pa. U5
1¼	10x408	Johnstown,Pa. B2
1¼	10x516	IndianaHarbor,Ind. I-2
1¼	10x624	SparrowsPoint,Md. B2
1¼	10x756	So.Chicago,Ill. U5
1¼	11x492	IndianaHarbor,Ind. I-2
1¼	11x1025	Munhall,Pa. U5
1¼	12x408	Johnstown,Pa. B2
1¼	12x600	Minnequa,Colo. C10
1¼	12x744	So.Chicago,Ill. U5
1¼	12x1380	SparrowsPoint,Md. B2
1¼	12 thru 26 x 492	Ind.Harbor,Ind. I-2
1¼	13x867	Munhall,Pa. U5
1¼	14x408	Johnstown,Pa. B2
1¼	14x732	So.Chicago,Ill. U5
1¼	14x1380	SparrowsPoint,Md. B2
1¼	15x751	Munhall,Pa. U5
1¼	16x408	Johnstown,Pa. B2
1¼	16x732	So.Chicago,Ill. U5
1¼	16x1320	SparrowsPoint,Md. B2
1¼	17x987	Munhall,Pa. U5
1¼	18x408	Johnstown,Pa. B2
1¼	18x726	So.Chicago,Ill. U5
1¼	18x1320	SparrowsPoint,Md. B2
1¼	19x976	Munhall,Pa. U5
1¼	20x408	Johnstown,Pa. B2
1¼	20x720	So.Chicago,Ill. U5
1¼	20x1440	SparrowsPoint,Md. B2
1¼	21x968	Munhall,Pa. U5
1¼	22x408	Johnstown,Pa. B2
1¼	22x720	So.Chicago,Ill. U5
1¼	22x1440	SparrowsPoint,Md. B2
1¼	23x961	Munhall,Pa. U5
1¼	24x408	Johnstown,Pa. B2
1¼	24x714	So.Chicago,Ill. U5
1¼	24x1440	SparrowsPoint,Md. B2
1¼	25x954	Munhall,Pa. U5
1¼	26x408	Johnstown,Pa. B2
1¼	26x714	So.Chicago,Ill. U5
1¼	26x1440	SparrowsPoint,Md. B2
1¼	27x949	Munhall,Pa. U5
1¼	28x408	Johnstown,Pa. B2
1¼	28x708	So.Chicago,Ill. U5
1¼	28x1440	SparrowsPoint,Md. B2
1¼	29x945	Munhall,Pa. U5
1¼	30x408	Johnstown,Pa. B2
1¼	30x660	So.Chicago,Ill. U5
1¼	30x1440	SparrowsPoint,Md. B2
1¼	31x904	Munhall,Pa. U5
1¼	32x408	Johnstown,Pa. B2
1¼	32x1320	SparrowsPoint,Md. B2
1¼	33x850	Munhall,Pa. U5
1¼	34x408	Johnstown,Pa. B2
1¼	34x1320	SparrowsPoint,Md. B2
1¼	36x408	Johnstown,Pa. B2
1¼	36x779	Munhall,Pa. U5
1¼	36x1140	SparrowsPoint,Md. B2
1¼	37x758	Munhall,Pa. U5
1¼	38x1140	SparrowsPoint,Md. B2
1¼	39x719	Munhall,Pa. U5
1¼	40x960	SparrowsPoint,Md. B2
1¼	41x684	Munhall,Pa. U5
1¼	42x1080	SparrowsPoint,Md. B2
1¼	43x652	Munhall,Pa. U5
1¼	44x960	SparrowsPoint,Md. B2
1¼	45x623	Munhall,Pa. U5
1¼	46x960	SparrowsPoint,Md. B2
1¼	47x597	Munhall,Pa. U5
1¼	48x1080	SparrowsPoint,Md. B2
1¼	50x1080	SparrowsPoint,Md. B2
1¼	52x1080	SparrowsPoint,Md. B2
1¼	54x1080	SparrowsPoint,Md. B2
1¼	56x1140	SparrowsPoint,Md. B2
1¼	58x1140	SparrowsPoint,Md. B2
1⅜	6 1/16x636	So.Chicago,Ill. U5
1⅜	6¼x384	Johnstown,Pa. B2
1⅜	6¼x372	Clairton,Pa. U5
1⅜	6½x360	Clairton,Pa. U5
1⅜	6½x660	So.Chicago,Ill. U5
1⅜	6¾x348	Clairton,Pa. U5
1⅜	7x336	Clairton,Pa. U5
1⅜	7x492	Seattle B3
1⅜	7x684	So.Chicago,Ill. U5
1⅜	7¼x312	Clairton,Pa. U5
1⅜	7½x300	Clairton,Pa. U5
1⅜	7½x714	So.Chicago,Ill. U5
1⅜	7¾x288	Clairton,Pa. U5
1⅜	8x276	Clairton,Pa. U5
1⅜	8x384	Johnstown,Pa. B2
1⅜	8x432	Seattle B3
1⅜	8x714	So.Chicago,Ill. U5
1⅜	8¼x276	Clairton,Pa. U5
1⅜	8½x264	Clairton,Pa. U5
1⅜	8½x708	So.Chicago,Ill. U5
1⅜	8¾x264	Clairton,Pa. U5
1⅜	9x264	Clairton,Pa. U5
1⅜	9x708	So.Chicago,Ill. U5
1⅜	9¼x264	Clairton,Pa. U5
1⅜	9½x264	Clairton,Pa. U5
1⅜	9½x702	So.Chicago,Ill. U5
1⅜	9¾x240	Clairton,Pa. U5
1⅜	10x240	Clairton,Pa. U5
1⅜	10x384	Johnstown,Pa. B2
1⅜	10x660	SparrowsPoint,Md. B2
1⅜	10x702	So.Chicago,Ill. U5
1⅜	11x956	Munhall,Pa. U5
1⅜	12x384	Johnstown,Pa. B2
1⅜	12x696	So.Chicago,Ill. U5
1⅜	12x1260	SparrowsPoint,Md. B2
1⅜	13x899	Munhall,Pa. U5
1⅜	14x384	Johnstown,Pa. B2
1⅜	14x684	So.Chicago,Ill. U5
1⅜	14x1260	SparrowsPoint,Md. B2
1⅜	15x701	Munhall,Pa. U5
1⅜	16x384	Johnstown,Pa. B2
1⅜	16x684	So.Chicago,Ill. U5
1⅜	16x1140	SparrowsPoint,Md. B2
1⅜	17x921	Munhall,Pa. U5
1⅜	18x384	Johnstown,Pa. B2
1⅜	18x678	So.Chicago,Ill. U5
1⅜	18x1140	SparrowsPoint,Md. B2
1⅜	19x912	Munhall,Pa. U5
1⅜	20x384	Johnstown,Pa. B2
1⅜	20x672	So.Chicago,Ill. U5
1⅜	20x1440	SparrowsPoint,Md. B2
1⅜	21x904	Munhall,Pa. U5
1⅜	22x384	Johnstown,Pa. B2

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Plates, Universal

CONTINUED FROM PRECEDING PAGE

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
1⅝	22x672	So.Chicago,Ill. U5
1⅝	22x1440	SparrowsPoint,Md. B2
1⅝	23x896	Munhall,Pa. U5
1⅝	24x384	Johnstown,Pa. B2
1⅝	24x666	So.Chicago,Ill. U5
1⅝	24x1440	SparrowsPoint,Md. B2
1⅝	25x891	Munhall,Pa. U5
1⅝	26x384	Johnstown,Pa. B2
1⅝	26x666	So.Chicago,Ill. U5
1⅝	26x1440	SparrowsPoint,Md. B2
1⅝	27x886	Munhall,Pa. U5
1⅝	28x384	Johnstown,Pa. B2
1⅝	28x660	So.Chicago,Ill. U5
1⅝	28x1380	SparrowsPoint,Md. B2
1⅝	29x882	Munhall,Pa. U5
1⅝	30x384	Johnstown,Pa. B2
1⅝	30x624	So.Chicago,Ill. U5
1⅝	30x1380	SparrowsPoint,Md. B2
1⅝	31x844	Munhall,Pa. U5
1⅝	32x384	Johnstown,Pa. B2
1⅝	32x1200	SparrowsPoint,Md. B2
1⅝	33x793	Munhall,Pa. U5
1⅝	34x384	Johnstown,Pa. B2
1⅝	34x1200	SparrowsPoint,Md. B2
1⅝	36x384	Johnstown,Pa. B2
1⅝	36x726	Munhall,Pa. U5
1⅝	36x1080	SparrowsPoint,Md. B2
1⅝	37x707	Munhall,Pa. U5
1⅝	38x1080	SparrowsPoint,Md. B2
1⅝	39x671	Munhall,Pa. U5
1⅝	40x960	SparrowsPoint,Md. B2
1⅝	41x638	Munhall,Pa. U5
1⅝	42x960	SparrowsPoint,Md. B2
1⅝	43x608	Munhall,Pa. U5
1⅝	44x960	SparrowsPoint,Md. B2
1⅝	45x581	Munhall,Pa. U5
1⅝	46x960	SparrowsPoint,Md. B2
1⅝	47x556	Munhall,Pa. U5
1⅝	48x960	SparrowsPoint,Md. B2
1⅝	50x960	SparrowsPoint,Md. B2
1⅝	52x960	SparrowsPoint,Md. B2
1⅝	54x960	SparrowsPoint,Md. B2
1⅝	56x1080	SparrowsPoint,Md. B2
1⅝	58x1080	SparrowsPoint,Md. B2
2	6⅛x600	So.Chicago,Ill. U5
2	6¼x372	Johnstown,Pa. B2
2	6¼x348	Clairton,Pa. U5
2	6¼x360	IndianaHarbor,Ind. I-2
2	6⅜x336	Clairton,Pa. U5
2	6½x384	IndianaHarbor,Ind. I-2
2	6½x612	So.Chicago,Ill. U5
2	6⅝x312	Clairton,Pa. U5
2	6⅝x384	IndianaHarbor,Ind. I-2
2	7x300	Clairton,Pa. U5
2	7x456	IndianaHarbor,Ind. I-2
2	7x456	Seattle B3
2	7x636	So.Chicago,Ill. U5
2	7¼x288	Clairton,Pa. U5
2	7½x276	Clairton,Pa. U5
2	7½x480	IndianaHarbor,Ind. I-2
2	7½x672	So.Chicago,Ill. U5
2	7⅝x276	Clairton,Pa. U5
2	8x264	Clairton,Pa. U5
2	8x372	Johnstown,Pa. B2
2	8x408	Seattle B3
2	8x540	IndianaHarbor,Ind. I-2
2	8x666	So.Chicago,Ill. U5
2	8¼x264	Clairton,Pa. U5
2	8½x264	Clairton,Pa. U5
2	8½x660	So.Chicago,Ill. U5
2	8⅝x264	Clairton,Pa. U5
2	9x264	Clairton,Pa. U5
2	9x540	IndianaHarbor,Ind. I-2
2	9x660	So.Chicago,Ill. U5
2	9¼x264	Clairton,Pa. U5
2	9¼x240	Clairton,Pa. U5
2	9½x660	So.Chicago,Ill. U5
2	9⅝x240	Clairton,Pa. U5
2	10x228	Clairton,Pa. U5
2	10x372	Johnstown,Pa. B2
2	10x468	IndianaHarbor,Ind. I-2
2	10x552	SparrowsPoint,Md. B2
2	10x648	So.Chicago,Ill. U5
2	11x420	IndianaHarbor,Ind. I-2
2	11x897	Munhall,Pa. U5
2	12x372	Johnstown,Pa. B2
2	12x540	Minnequa,Colo. C10
2	12x648	So.Chicago,Ill. U5
2	12x1200	SparrowsPoint,Md. B2
2	12 thru 26 x 432	Ind.Harbor,Ind. I-2
2	13x759	Munhall,Pa. U5
2	14x372	Johnstown,Pa. B2
2	14x648	So.Chicago,Ill. U5
2	14x1200	SparrowsPoint,Md. B2
2	15x657	Munhall,Pa. U5
2	16x372	Johnstown,Pa. B2
2	16x636	So.Chicago,Ill. U5
2	16x1080	SparrowsPoint,Md. B2
2	17x863	Munhall,Pa. U5
2	18x372	Johnstown,Pa. B2
2	18x630	So.Chicago,Ill. U5
2	18x1080	SparrowsPoint,Md. B2
2	19x854	Munhall,Pa. U5
2	20x372	Johnstown,Pa. B2
2	20x630	So.Chicago,Ill. U5
2	20x1440	SparrowsPoint,Md. B2
2	21x847	Munhall,Pa. U5
2	22x372	Johnstown,Pa. B2
2	22x624	So.Chicago,Ill. U5
2	22x1440	SparrowsPoint,Md. B2
2	23x840	Munhall,Pa. U5
2	24x372	Johnstown,Pa. B2
2	24x624	So.Chicago,Ill. U5
2	24x1440	SparrowsPoint,Md. B2
2	25x835	Munhall,Pa. U5
2	26x372	Johnstown,Pa. B2
2	26x624	So.Chicago,Ill. U5
2	26x1440	SparrowsPoint,Md. B2
2	27x830	Munhall,Pa. U5
2	28x372	Johnstown,Pa. B2
2	28x624	So.Chicago,Ill. U5
2	28x1320	SparrowsPoint,Md. B2
2	29x826	Munhall,Pa. U5
2	30x372	Johnstown,Pa. B2
2	30x576	So.Chicago,Ill. U5
2	30x1320	SparrowsPoint,Md. B2
2	31x791	Munhall,Pa. U5
2	32x372	Johnstown,Pa. B2
2	32x1140	SparrowsPoint,Md. B2
2	33x744	Munhall,Pa. U5
2	34x372	Johnstown,Pa. B2
2	34x1140	SparrowsPoint,Md. B2
2	36x372	Johnstown,Pa. B2
2	36x681	Munhall,Pa. U5
2	36x1020	SparrowsPoint,Md. B2
2	37x663	Munhall,Pa. U5
2	38x1020	SparrowsPoint,Md. B2
2	39x629	Munhall,Pa. U5
2	40x900	SparrowsPoint,Md. B2
2	41x596	Munhall,Pa. U5
2	42x900	SparrowsPoint,Md. B2
2	43x571	Munhall,Pa. U5
2	44x840	SparrowsPoint,Md. B2
2	45x545	Munhall,Pa. U5
2	46x840	SparrowsPoint,Md. B2
2	47x522	Munhall,Pa. U5
2	48x960	SparrowsPoint,Md. B2
2	50x960	SparrowsPoint,Md. B2
2	52x960	SparrowsPoint,Md. B2
2	54x960	SparrowsPoint,Md. B2
2	56x960	SparrowsPoint,Md. B2
2	58x960	SparrowsPoint,Md. B2
2⅛	6¼x336	Clairton,Pa. U5
2⅛	6½x324	Clairton,Pa. U5
2⅛	6¾x312	Clairton,Pa. U5
2⅛	7x300	Clairton,Pa. U5
2⅛	7¼x288	Clairton,Pa. U5
2⅛	7½x276	Clairton,Pa. U5
2⅛	7¾x264	Clairton,Pa. U5
2⅛	8x264	Clairton,Pa. U5
2⅛	8¼x264	Clairton,Pa. U5
2⅛	8½x264	Clairton,Pa. U5
2⅛	8¾x264	Clairton,Pa. U5
2⅛	9x252	Clairton,Pa. U5
2⅛	9¼x240	Clairton,Pa. U5
2⅛	9½x240	Clairton,Pa. U5
2⅛	9¾x228	Clairton,Pa. U5
2⅛	10x228	Clairton,Pa. U5
2¼	6⅛x528	So.Chicago,Ill. U5
2¼	6⅛x336	Johnstown,Pa. B2
2¼	6¼x312	Clairton,Pa. U5
2¼	6½x300	Clairton,Pa. U5
2¼	6½x552	So.Chicago,Ill. U5
2¼	6¾x288	Clairton,Pa. U5
2¼	7x276	Clairton,Pa. U5
2¼	7x570	So.Chicago,Ill. U5
2¼	7¼x264	Clairton,Pa. U5
2¼	7½x264	Clairton,Pa. U5
2¼	7½x594	So.Chicago,Ill. U5
2¼	7¾x252	Clairton,Pa. U5
2¼	8x252	Clairton,Pa. U5
2¼	8x336	Johnstown,Pa. B2
2¼	8x588	So.Chicago,Ill. U5
2¼	8¼x252	Clairton,Pa. U5
2¼	8½x252	Clairton,Pa. U5
2¼	8½x588	So.Chicago,Ill. U5
2¼	8¾x240	Clairton,Pa. U5
2¼	9x240	Clairton,Pa. U5
2¼	9x588	So.Chicago,Ill. U5
2¼	9¼x228	Clairton,Pa. U5
2¼	9½x216	Clairton,Pa. U5
2¼	9½x582	So.Chicago,Ill. U5
2¼	9¾x216	Clairton,Pa. U5
2¼	10x204	Clairton,Pa. U5
2¼	10x336	Johnstown,Pa. B2
2¼	10x582	So.Chicago,Ill. U5
2¼	10x1020	SparrowsPoint,Md. B2
2¼	11x764	Munhall,Pa. U5
2¼	12x336	Johnstown,Pa. B2
2¼	12x576	So.Chicago,Ill. U5
2¼	12x1440	SparrowsPoint,Md. B2
2¼	13x646	Munhall,Pa. U5
2¼	14x336	Johnstown,Pa. B2
2¼	14x570	So.Chicago,Ill. U5
2¼	14x1440	SparrowsPoint,Md. B2
2¼	15x761	Munhall,Pa. U5
2¼	16x336	Johnstown,Pa. B2
2¼	16x564	So.Chicago,Ill. U5
2¼	16x1325	SparrowsPoint,Md. B2
2¼	17x736	Munhall,Pa. U5
2¼	18x336	Johnstown,Pa. B2
2¼	18x558	So.Chicago,Ill. U5
2¼	18x1180	SparrowsPoint,Md. B2
2¼	19x729	Munhall,Pa. U5
2¼	20x336	Johnstown,Pa. B2
2¼	20x558	So.Chicago,Ill. U5
2¼	20x1060	SparrowsPoint,Md. B2
2¼	21x722	Munhall,Pa. U5
2¼	22x336	Johnstown,Pa. B2
2¼	22x552	So.Chicago,Ill. U5
2¼	22x965	SparrowsPoint,Md. B2
2¼	23x716	Munhall,Pa. U5
2¼	24x336	Johnstown,Pa. B2
2¼	24x552	So.Chicago,Ill. U5
2¼	24x1275	SparrowsPoint,Md. B2
2¼	25x711	Munhall,Pa. U5
2¼	26x336	Johnstown,Pa. B2
2¼	26x552	So.Chicago,Ill. U5
2¼	26x1175	SparrowsPoint,Md. B2
2¼	27x708	Munhall,Pa. U5
2¼	28x336	Johnstown,Pa. B2
2¼	28x546	So.Chicago,Ill. U5
2¼	28x1090	SparrowsPoint,Md. B2
2¼	29x704	Munhall,Pa. U5
2¼	30x336	Johnstown,Pa. B2
2¼	30x510	So.Chicago,Ill. U5
2¼	30x1020	SparrowsPoint,Md. B2
2¼	31x675	Munhall,Pa. U5
2¼	32x336	Johnstown,Pa. B2
2¼	32x955	SparrowsPoint,Md. B2
2¼	33x632	Munhall,Pa. U5
2¼	34x336	Johnstown,Pa. B2
2¼	34x900	SparrowsPoint,Md. B2
2¼	35x596	Munhall,Pa. U5
2¼	36x336	Johnstown,Pa. B2
2¼	36x850	SparrowsPoint,Md. B2
2¼	37x564	Munhall,Pa. U5
2¼	38x805	SparrowsPoint,Md. B2
2¼	39x535	Munhall,Pa. U5
2¼	40x765	SparrowsPoint,Md. B2
2¼	41x508	Munhall,Pa. U5
2¼	42x730	SparrowsPoint,Md. B2
2¼	43x485	Munhall,Pa. U5
2¼	44x700	SparrowsPoint,Md. B2
2¼	45x463	Munhall,Pa. U5
2¼	46x444	Munhall,Pa. U5
2¼	46x665	SparrowsPoint,Md. B2
2¼	48x915	SparrowsPoint,Md. B2
2¼	50x880	SparrowsPoint,Md. B2
2¼	52x845	SparrowsPoint,Md. B2
2¼	54x815	SparrowsPoint,Md. B2
2¼	56x840	SparrowsPoint,Md. B2
2¼	58x810	SparrowsPoint,Md. B2
2⅜	6¼x300	Clairton,Pa. U5
2⅜	6½x288	Clairton,Pa. U5
2⅜	6¾x276	Clairton,Pa. U5
2⅜	7x276	Clairton,Pa. U5
2⅜	7¼x264	Clairton,Pa. U5
2⅜	7½x252	Clairton,Pa. U5
2⅜	7¾x252	Clairton,Pa. U5
2⅜	8x252	Clairton,Pa. U5
2⅜	8¼x252	Clairton,Pa. U5
2⅜	8½x240	Clairton,Pa. U5
2⅜	8¾x240	Clairton,Pa. U5
2⅜	9x228	Clairton,Pa. U5
2⅜	9¼x228	Clairton,Pa. U5
2⅜	9½x216	Clairton,Pa. U5
2⅜	9¾x204	Clairton,Pa. U5
2⅜	10x204	Clairton,Pa. U5
2⅜	6¼x300	Clairton,Pa. U5
2⅜	6½x288	Clairton,Pa. U5
2⅜	6¾x276	Clairton,Pa. U5
2⅜	7x264	Clairton,Pa. U5
2⅜	7¼x264	Clairton,Pa. U5
2⅜	7½x252	Clairton,Pa. U5
2⅜	7¾x240	Clairton,Pa. U5
2⅜	8x240	Clairton,Pa. U5
2⅜	8¼x240	Clairton,Pa. U5
2⅜	8½x240	Clairton,Pa. U5
2⅜	8¾x228	Clairton,Pa. U5
2⅜	9x216	Clairton,Pa. U5
2⅜	9¼x216	Clairton,Pa. U5
2⅜	9½x204	Clairton,Pa. U5
2⅜	9¾x204	Clairton,Pa. U5
2⅜	10x192	Clairton,Pa. U5
2½	6⅛x468	So.Chicago,Ill. U5
2½	6¼x300	Johnstown,Pa. B2
2½	6¼x276	Clairton,Pa. U5
2½	6½x264	Clairton,Pa. U5
2½	6½x186	So.Chicago,Ill. U5
2½	6⅝x252	Clairton,Pa. U5
2½	7x252	Clairton,Pa. U5
2½	7x510	So.Chicago,Ill. U5
2½	7¼x240	Clairton,Pa. U5
2½	7½x240	Clairton,Pa. U5
2½	7½x528	So.Chicago,Ill. U5
2½	7¾x228	Clairton,Pa. U5
2½	8x216	Clairton,Pa. U5
2½	8x300	Johnstown,Pa. B2
2½	8x528	So.Chicago,Ill. U5
2½	8¼x216	Clairton,Pa. U5
2½	8½x216	Clairton,Pa. U5
2½	8½x528	So.Chicago,Ill. U5
2½	8¾x216	Clairton,Pa. U5
2½	9x204	Clairton,Pa. U5
2½	9x528	So.Chicago,Ill. U5
2½	9¼x204	Clairton,Pa. U5
2½	9½x192	Clairton,Pa. U5
2½	9½x522	So.Chicago,Ill. U5

(Code number following mill point indicates producing company, key on page 38)

Hot-Rolled Plates, Universal

CONTINUED FROM PRECEDING PAGE

Thickness (inches)	Width, Max. Length (inches)	Mill Point, Producer
2½	9¾x192	Clairton,Pa. U5
2½	10x180	Clairton,Pa. U5
2½	10x300	Johnstown,Pa. B2
2½	10x522	So.Chicago,Ill. U5
2½	10x920	SparrowsPoint,Md. B2
2½	11x688	Munhall,Pa. U5
2½	12x300	Johnstown,Pa. B2
2½	12x516	So.Chicago,Ill. U5
2½	12x540	Minnequa,Colo. C10
2½	12x1440	SparrowsPoint,Md. B2
2½	13x582	Munhall,Pa. U5
2½	14x300	Johnstown,Pa. B2
2½	14x510	So.Chicago,Ill. U5
2½	14x1360	SparrowsPoint,Md. B2
2½	15x505	Munhall,Pa. U5
2½	16x300	Johnstown,Pa. B2
2½	16x504	So.Chicago,Ill. U5
2½	16x1190	SparrowsPoint,Md. B2
2½	17x662	Munhall,Pa. U5
2½	18x300	Johnstown,Pa. B2
2½	18x504	So.Chicago,Ill. U5
2½	18x1060	SparrowsPoint,Md. B2
2½	19x656	Munhall,Pa. U5
2½	20x300	Johnstown,Pa. B2
2½	20x498	So.Chicago,Ill. U5
2½	20x955	SparrowsPoint,Md. B2
2½	21x649	Munhall,Pa. U5
2½	22x300	Johnstown,Pa. B2
2½	22x498	So.Chicago,Ill. U5
2½	22x870	SparrowsPoint,Md. B2
2½	23x644	Munhall,Pa. U5
2½	24x300	Johnstown,Pa. B2
2½	24x492	So.Chicago,Ill. U5
2½	24x1150	SparrowsPoint,Md. B2
2½	25x640	Munhall,Pa. U5
2½	26x300	Johnstown,Pa. B2
2½	26x492	So.Chicago,Ill. U5
2½	26x1060	SparrowsPoint,Md. B2
2½	27x637	Munhall,Pa. U5
2½	28x300	Johnstown,Pa. B2
2½	28x492	So.Chicago,Ill. U5
2½	28x985	SparrowsPoint,Md. B2
2½	29x634	Munhall,Pa. U5
2½	30x300	Johnstown,Pa. B2
2½	30x456	So.Chicago,Ill. U5
2½	30x920	SparrowsPoint,Md. B2
2½	31x606	Munhall,Pa. U5
2½	32x300	Johnstown,Pa. B2
2½	32x860	SparrowsPoint,Md. B2
2½	33x568	Munhall,Pa. U5
2½	34x300	Johnstown,Pa. B2
2½	34x810	SparrowsPoint,Md. B2
2½	35x536	Munhall,Pa. U5
2½	36x300	Johnstown,Pa. B2
2½	36x765	SparrowsPoint,Md. B2
2½	37x507	Munhall,Pa. U5
2½	38x725	SparrowsPoint,Md. B2
2½	39x481	Munhall,Pa. U5
2½	40x690	SparrowsPoint,Md. B2
2½	41x458	Munhall,Pa. U5
2½	42x655	SparrowsPoint,Md. B2
2½	43x437	Munhall,Pa. U5
2½	44x625	SparrowsPoint,Md. B2
2½	45x417	Munhall,Pa. U5
2½	46x400	Munhall,Pa. U5
2½	46x600	SparrowsPoint,Md. B2
2½	48x825	SparrowsPoint,Md. B2
2½	50x790	SparrowsPoint,Md. B2
2½	52x760	SparrowsPoint,Md. B2
2½	54x730	SparrowsPoint,Md. B2
2½	56x760	SparrowsPoint,Md. B2
2½	58x730	SparrowsPoint,Md. B2
2⅝	6¼x264	Clairton,Pa. U5
2⅝	6½x252	Clairton,Pa. U5
2⅝	6¾x240	Clairton,Pa. U5
2⅝	7x240	Clairton,Pa. U5
2⅝	7¼x288	Clairton,Pa. U5
2⅝	7½x228	Clairton,Pa. U5
2⅝	7¾x204	Clairton,Pa. U5
2⅝	8x204	Clairton,Pa. U5
2¾	6⅛x420	So.Chicago,Ill. U5
2¾	6⅛x276	Johnstown,Pa. B2
2¾	6¼x252	Clairton,Pa. U5
2¾	6½x240	Clairton,Pa. U5
2¾	6½x444	So.Chicago,Ill. U5
2¾	6¾x240	Clairton,Pa. U5
2¾	7x228	Clairton,Pa. U5
2¾	7x462	So.Chicago,Ill. U5
2¾	7¼x216	Clairton,Pa. U5
2¾	7½x204	Clairton,Pa. U5
2¾	7½x480	So.Chicago,Ill. U5
2¾	7¾x192	Clairton,Pa. U5
2¾	8x192	Clairton,Pa. U5
2¾	8x276	Johnstown,Pa. B2
2¾	8x480	So.Chicago,Ill. U5
2¾	8⅛x474	So.Chicago,Ill. U5
2¾	9x474	So.Chicago,Ill. U5
2¾	9⅛x474	So.Chicago,Ill. U5
2¾	10x276	Johnstown,Pa. B2
2¾	10x474	So.Chicago,Ill. U5
2¾	10x835	SparrowsPoint,Md. B2
2¾	12x276	Johnstown,Pa. B2
2¾	12x468	So.Chicago,Ill. U5
2¾	12x1440	SparrowsPoint,Md. B2
2¾	14x276	Johnstown,Pa. B2
2¾	14x462	So.Chicago,Ill. U5
2¾	14x1240	SparrowsPoint,Md. B2
2¾	16x276	Johnstown,Pa. B2
2¾	16x456	So.Chicago,Ill. U5
2¾	16x1085	SparrowsPoint,Md. B2
2¾	18x276	Johnstown,Pa. B2
2¾	18x456	So.Chicago,Ill. U5
2¾	18x965	SparrowsPoint,Md. B2
2¾	20x276	Johnstown,Pa. B2
2¾	20x450	So.Chicago,Ill. U5
2¾	20x865	SparrowsPoint,Md. B2
2¾	22x276	Johnstown,Pa. B2
2¾	22x450	So.Chicago,Ill. U5
2¾	22x790	SparrowsPoint,Md. B2
2¾	24x276	Johnstown,Pa. B2
2¾	24x450	So.Chicago,Ill. U5
2¾	24x1040	SparrowsPoint,Md. B2
2¾	26x276	Johnstown,Pa. B2
2¾	26x450	So.Chicago,Ill. U5
2¾	26x965	SparrowsPoint,Md. B2
2¾	28x276	Johnstown,Pa. B2
2¾	28x444	So.Chicago,Ill. U5
2¾	28x895	SparrowsPoint,Md. B2
2¾	30x276	Johnstown,Pa. B2
2¾	30x414	So.Chicago,Ill. U5
2¾	30x835	SparrowsPoint,Md. B2
2¾	32x276	Johnstown,Pa. B2
2¾	32x785	SparrowsPoint,Md. B2
2¾	34x276	Johnstown,Pa. B2
2¾	34x710	SparrowsPoint,Md. B2
2¾	36x276	Johnstown,Pa. B2
2¾	36x695	SparrowsPoint,Md. B2
2¾	38x660	SparrowsPoint,Md. B2
2¾	40x625	SparrowsPoint,Md. B2
2¾	42x595	SparrowsPoint,Md. B2
2¾	44x570	SparrowsPoint,Md. B2
2¾	46x545	SparrowsPoint,Md. B2
2¾	48x750	SparrowsPoint,Md. B2
2¾	50x720	SparrowsPoint,Md. B2
2¾	52x690	SparrowsPoint,Md. B2
2¾	54x665	SparrowsPoint,Md. B2
2¾	56x690	SparrowsPoint,Md. B2
2¾	58x665	Clairton,Pa. U5
2⅞	6¼x240	Clairton,Pa. U5
2⅞	6½x240	Clairton,Pa. U5
2⅞	6¾x228	Clairton,Pa. U5
2⅞	7x216	Clairton,Pa. U5
2⅞	7¼x216	Clairton,Pa. U5
2⅞	7½x192	Clairton,Pa. U5
2⅞	7¾x192	Clairton,Pa. U5
2⅞	8x192	Clairton,Pa. U5
3	6¼x228	Johnstown,Pa. B2
3	6¼x240	Clairton,Pa. U5
3	6½x228	Clairton,Pa. U5
3	6¾x216	Clairton,Pa. U5
3	7x204	Clairton,Pa. U5
3	7¼x204	Clairton,Pa. U5
3	7½x192	So.Chicago,Ill. U5
3	7½x438	Clairton,Pa. U5
3	7¾x180	Clairton,Pa. U5
3	8x180	Johnstown,Pa. B2
3	8x240	So.Chicago,Ill. U5
3	8x438	So.Chicago,Ill. U5
3	8⅛x432	So.Chicago,Ill. U5
3	9x432	So.Chicago,Ill. U5
3	9⅛x432	So.Chicago,Ill. U5
3	10x240	Johnstown,Pa. B2
3	10x432	So.Chicago,Ill. U5
3	10x765	SparrowsPoint,Md. B2
3	11x573	Munhall,Pa. U5
3	12x240	Johnstown,Pa. B2
3	12x426	So.Chicago,Ill. U5
3	12x1325	SparrowsPoint,Md. B2
3	13x485	Munhall,Pa. U5
3	14x240	Johnstown,Pa. B2
3	14x420	So.Chicago,Ill. U5
3	14x1135	SparrowsPoint,Md. B2
3	15x420	Munhall,Pa. U5
3	16x240	Johnstown,Pa. B2
3	16x420	So.Chicago,Ill. U5
3	16x995	SparrowsPoint,Md. B2
3	17x552	Munhall,Pa. U5
3	18x240	Johnstown,Pa. B2
3	18x414	So.Chicago,Ill. U5
3	18x880	SparrowsPoint,Md. B2
3	19x546	Munhall,Pa. U5
3	20x240	Johnstown,Pa. B2
3	20x414	So.Chicago,Ill. U5
3	20x795	SparrowsPoint,Md. B2
3	21x541	Munhall,Pa. U5
3	22x240	Johnstown,Pa. B2
3	22x408	So.Chicago,Ill. U5
3	22x720	SparrowsPoint,Md. B2
3	23x537	Munhall,Pa. U5
3	24x240	Johnstown,Pa. B2
3	24x408	So.Chicago,Ill. U5
3	24x960	SparrowsPoint,Md. B2
3	25x533	Munhall,Pa. U5
3	26x240	Johnstown,Pa. B2
3	26x408	So.Chicago,Ill. U5
3	26x885	SparrowsPoint,Md. B2
3	27x531	Munhall,Pa. U5
3	28x240	Johnstown,Pa. B2
3	28x408	So.Chicago,Ill. U5
3	28x820	SparrowsPoint,Md. B2
3	29x528	Munhall,Pa. U5
3	30x240	Johnstown,Pa. B2
3	30x378	So.Chicago,Ill. U5
3	30x765	SparrowsPoint,Md. B2
3	31x506	Munhall,Pa. U5
3	32x240	Johnstown,Pa. B2
3	32x715	SparrowsPoint,Md. B2
3	33x474	Munhall,Pa. U5
3	34x240	Johnstown,Pa. B2
3	34x675	SparrowsPoint,Md. B2
3	35x447	Munhall,Pa. U5
3	36x240	Johnstown,Pa. B2
3	36x640	SparrowsPoint,Md. B2
3	37x423	Munhall,Pa. U5
3	38x604	SparrowsPoint,Md. B2
3	39x401	Munhall,Pa. U5
3	40x575	SparrowsPoint,Md. B2
3	41x381	Munhall,Pa. U5
3	42x545	SparrowsPoint,Md. B2
3	43x364	Munhall,Pa. U5
3	44x520	SparrowsPoint,Md. B2
3	45x347	Munhall,Pa. U5
3	46x333	Munhall,Pa. U5
3	46x500	SparrowsPoint,Md. B2
3	48x690	SparrowsPoint,Md. B2
3	50x660	SparrowsPoint,Md. B2
3	52x635	SparrowsPoint,Md. B2
3	54x610	SparrowsPoint,Md. B2
3	56x630	SparrowsPoint,Md. B2
3	58x610	SparrowsPoint,Md. B2
3½	7½x372	So.Chicago,Ill. U5
3½	8x372	So.Chicago,Ill. U5
3½	8½x372	So.Chicago,Ill. U5
3½	9x366	So.Chicago,Ill. U5
3½	9½x366	So.Chicago,Ill. U5
3½	10x366	So.Chicago,Ill. U5
3½	10x655	SparrowsPoint,Md. B2
3½	11x491	Munhall,Pa. U5
3½	12x366	So.Chicago,Ill. U5
3½	12x1135	SparrowsPoint,Md. B2
3½	13x415	Munhall,Pa. U5
3½	14x360	So.Chicago,Ill. U5
3½	14x973	SparrowsPoint,Md. B2
3½	15x360	Munhall,Pa. U5
3½	16x354	So.Chicago,Ill. U5
3½	16x850	SparrowsPoint,Md. B2
3½	17x473	Munhall,Pa. U5
3½	18x354	So.Chicago,Ill. U5
3½	18x755	SparrowsPoint,Md. B2
3½	19x468	Munhall,Pa. U5
3½	20x348	So.Chicago,Ill. U5
3½	20x680	SparrowsPoint,Md. B2
3½	21x464	Munhall,Pa. U5
3½	22x348	So.Chicago,Ill. U5
3½	22x620	SparrowsPoint,Md. B2
3½	23x460	Munhall,Pa. U5
3½	24x348	So.Chicago,Ill. U5
3½	24x820	SparrowsPoint,Md. B2
3½	25x457	Munhall,Pa. U5
3½	26x348	So.Chicago,Ill. U5
3½	26x760	SparrowsPoint,Md. B2
3½	27x455	Munhall,Pa. U5
3½	28x348	So.Chicago,Ill. U5
3½	28x700	SparrowsPoint,Md. B2
3½	29x453	Munhall,Pa. U5
3½	30x324	So.Chicago,Ill. U5
3½	30x655	SparrowsPoint,Md. B2
3½	31x433	Munhall,Pa. U5
3½	32x615	SparrowsPoint,Md. B2
3½	33x406	Munhall,Pa. U5
3½	34x580	SparrowsPoint,Md. B2
3½	35x383	Munhall,Pa. U5
3½	36x545	SparrowsPoint,Md. B2
3½	37x362	Munhall,Pa. U5
3½	38x520	SparrowsPoint,Md. B2
3½	39x344	Munhall,Pa. U5
3½	40x490	SparrowsPoint,Md. B2
3½	41x327	Munhall,Pa. U5
3½	42x470	SparrowsPoint,Md. B2
3½	43x312	Munhall,Pa. U5
3½	44x445	SparrowsPoint,Md. B2
3½	45x298	Munhall,Pa. U5
3½	46x284	Munhall,Pa. U5
3½	46x425	SparrowsPoint,Md. B2
3½	48x590	SparrowsPoint,Md. B2
3½	50x765	SparrowsPoint,Md. B2
3½	52x545	SparrowsPoint,Md. B2
3½	54x525	SparrowsPoint,Md. B2
3½	56x540	SparrowsPoint,Md. B2
3½	58x520	SparrowsPoint,Md. B2

Listings of universal plates are limited to those 3½ inches and less in thickness. For information about thicker plates make inquiry of the producers listed in the preceding columns.

HOT-ROLLED BARS (Carbon Steel)

(Code number following mill point indicates producing company, key on page 38)

Flats

Sizes Produced (inches)	Mill Point, Producer
.049 .625 x 1½–12	Tacony,Phila. D4
.049 1½ x 1⅞–4	Tacony,Phila. D4
.095 1½ x 3⅛–16	Tacony,Phila. D4
100 1½ x 2	Economy,Pa. B14
⅛–⅞ x ½–1	Johnstown,Pa. B2
⅛ x ⅜	Knoxville,Tenn. K6
⅛ x ½	Knoxville,Tenn. K6
⅛ x ⅝	Knoxville,Tenn. K6
⅛ x ¾	Knoxville,Tenn. K6
⅛ x 1	Knoxville,Tenn. K6
⅛ x 1¼	Knoxville,Tenn. K6
⅛ x 1½	Knoxville,Tenn. K6
⅛ x 1¾	Knoxville,Tenn. K6
⅛ x 2	Knoxville,Tenn. K6
⅛ x 2¼	Knoxville,Tenn. K6
⅛ x 2½	Knoxville,Tenn. K6
⅛ x 2¾	Knoxville,Tenn. K6
⅛ x 3	Knoxville,Tenn. K6
⅛ 2 x 3	Economy,Pa. B14
⅛ 2½ x 4	Economy,Pa. B14
150 2½ x 5	Economy,Pa. B14
150 2½ x 6	Economy,Pa. B14
3/16 x ⅜	Knoxville,Tenn. K6
3/16 x ½	Knoxville,Tenn. K6
3/16 x ¾	Tonawanda,N.Y. B12
3/16 x 1	Buffalo R2
3/16 x 1¼	Knoxville,Tenn. K6
3/16 x ⅜	Knoxville,Tenn. K6
3/16 x ½	Tonawanda,N.Y. B12
3/16 x ⅝	Knoxville,Tenn. K6
3/16 x ¾	Knoxville,Tenn. K6
3/16 x 1	Tonawanda,N.Y. B12
3/16 x 1¼	Knoxville,Tenn. K6
3/16 x 1½	Knoxville,Tenn. K6
3/16 x 1¾	Knoxville,Tenn. K6
3/16 x 2	Knoxville,Tenn. K6
3/16 x 2¼	Knoxville,Tenn. K6
3/16 x 2½	Knoxville,Tenn. K6
3/16 x 2¾	Knoxville,Tenn. K6
3/16 x 3	Knoxville,Tenn. K6
3/16 x 3¼	Knoxville,Tenn. K6
3/16 x 3½	Knoxville,Tenn. K6
3/16 x 3¾	Knoxville,Tenn. K6
3/16 x 4	Knoxville,Tenn. K6
3/16 x 4½	Knoxville,Tenn. K6
3/16 x 5	Knoxville,Tenn. K6
1/4–½ x ¾–⅞	AlabamaCity,Ala. R2
1/4–½ x 1⅜	Marion,O. P11
1/4–½ x 2¾	Marion,O. P11
1/4–½ x 3	Marion,O. P11
1/4–½ x 3¼	Marion,O. P11
1/4–½ x 3½	Marion,O. P11
1/4–½ x 3¾	Marion,O. P11
1/4–½ x 4	Marion,O. P11
1/4–⅝ x 2¼	Marion,O. P11
1/4–⅝ x 2½	Marion,O. P11
1/4–¾ x 1–3	AlabamaCity,Ala. R2
1/4–¾ x 1¼	Marion,O. P11
1/4–¾ x 1½	Marion,O. P11
1/4–¾ x 1⅝	Marion,O. P11
1/4–¾ x 1¾	Marion,O. P11
1/4–¾ x 1⅞	Marion,O. P11
1/4–¾ x 2	Marion,O. P11
1/4–1 x 3½	AlabamaCity,Ala. R2
1/4–2499 x 2–3	Gary,Ind. U5
1/4–2499 x 2–3	Youngstown U5
1/4–[illegible] x [illegible]	Youngstown U5
1/4–¾ inc. x ⅞	Ind.Harbor,Ind. I-2
1/4–1[illegible] x ½–1[illegible]	Gary,Ind. U5
1/4–1[illegible] x ½–1[illegible]	Youngstown U5
1/4–2½ x ½–6	Johnstown,Pa. B2
1/4–2½ x 1–6	SouthChicago,Ill. W14
1/4–3½ inc. x 1–6	Ind.Harb.,Ind. I-2
1/4 x ¾–1¾	Buffalo R2
1/4 x 1[illegible]–3½	Buffalo R2
1/4 x [illegible]	Youngstown U5
1/4 x [illegible]	Youngstown U5
.230–.500 x 2½–6	Weirtn,W.Va. W6
1/4 x 1¾–2¾	Fontana,Calif. K1
1/4 x 3	Fontana,Calif. K1
1/4 x 3½	Fontana,Calif. K1
1/4 x 4	Fontana,Calif. K1
1/4 x ⅝	Youngstown U5
1/4 x [illegible]	Youngstown U5
1/4 x ½–¾	Alton,Ill. L1
1/4 x ½–6	Atlanta A11
1/4 x ⅝	Knoxville,Tenn. K6
1/4 x ⅝	Minnequa,Colo. C10
1/4 x ¾	Knoxville,Tenn. K6
1/4 x ¾	Minnequa,Colo. C10
1/4 x ¾	Tonawanda,N.Y. B12
1/4 x ¾	Torrance,Calif. C11
1/4 x ⅞–1½	Buffalo R2
1/4 x ⅞–2¼	Milton,Pa. B6
1/4 x ⅞	Knoxville,Tenn. K6
1/4 x ⅞	Minnequa,Colo. C10
1/4 x 1	Knoxville,Tenn. K6

Sizes Produced (inches)	Mill Point, Producer
1/4 x 1	Minnequa,Colo. C10
1/4 x 1	Portland,Oreg. O4
1/4 x 1	Seattle N14
1/4 x 1	Tonawanda,N.Y. B12
1/4 x 1 1/16–2 7/8	Cleveland R2
1/4 x 1 1/8	Knoxville,Tenn. K6
1/4 x 1 1/8	Minnequa,Colo. C10
1/4 x 1 1/8	Portland,Oreg. O4
1/4 x 1 1/8	Tonawanda,N.Y. B12
1/4 x 1 1/4	Knoxville,Tenn. K6
1/4 x 1 1/4	Minnequa,Colo. C10
1/4 x 1 1/4	Portland,Oreg. O4
1/4 x 1 1/4	Seattle N14
1/4 x 1 1/4	Tonawanda,N.Y. B12
1/4 x 1 3/8	Knoxville,Tenn. K6
1/4 x 1 3/8	Minnequa,Colo. C10
1/4 x 1 3/8	Portland,Oreg. O4
1/4 x 1 3/8	Tonawanda,N.Y. B12
1/4 x 1 1/2	Knoxville,Tenn. K6
1/4 x 1 1/2	Minnequa,Colo. C10
1/4 x 1 1/2	Portland,Oreg. O4
1/4 x 1 1/2	Seattle N14
1/4 x 1 1/2	Tonawanda,N.Y. B12
1/4 x 1 1/2–3 1/2	Buffalo R2
1/4 x 1 5/8	Knoxville,Tenn. K6
1/4 x 1 5/8	Minnequa,Colo. C10
1/4 x 1 5/8	Portland,Oreg. O4
1/4 x 1 5/8	Seattle N14
1/4 x 1 5/8	Tonawanda,N.Y. B12
1/4 x 1 3/4	Knoxville,Tenn. K6
1/4 x 1 3/4	Minnequa,Colo. C10
1/4 x 1 3/4	Portland,Oreg. O4
1/4 x 1 3/4	Seattle N14
1/4 x 1 3/4	Tonawanda,N.Y. B12
1/4 x 1 7/8–2 3/4	Fontana,Calif. K1
1/4 x 2	Knoxville,Tenn. K6
1/4 x 2	Minnequa,Colo. C10
1/4 x 2	Portland,Oreg. O4
1/4 x 2	Seattle N14
1/4 x 2	SouthChicago,Ill. R2
1/4 x 2	Tonawanda,N.Y. B12
1/4 x 2–2 1/2	Fontana,Calif. K1
1/4 x 2 1/4	Knoxville,Tenn. K6
1/4 x 2 1/4	Minnequa,Colo. C10
1/4 x 2 1/4	Portland,Oreg. O4
1/4 x 2 1/4	Seattle N14
1/4 x 2 1/4	Tonawanda,N.Y. B12
1/4 x 2 1/2	Knoxville,Tenn. K6
1/4 x 2 1/2	Minnequa,Colo. C10
1/4 x 2 1/2	Portland,Oreg. O4
1/4 x 2 1/2	Seattle N14
1/4 x 2 1/2	Tonawanda,N.Y. B12
1/4 x 2 3/4	Knoxville,Tenn. K6
1/4 x 2 3/4	Minnequa,Colo. C10
1/4 x 2 3/4	Portland,Oreg. O4
1/4 x 2 3/4	Seattle N14
1/4 x 2 3/4	Tonawanda,N.Y. B12
1/4 x 3	Fontana,Calif. K1
1/4 x 3	Knoxville,Tenn. K6
1/4 x 3	Minnequa,Colo. C10
1/4 x 3	Portland,Oreg. O4
1/4 x 3	Seattle N14
1/4 x 3	Tonawanda,N.Y. B12
1/4 x 3–6	Fontana,Calif. K1
1/4 x 3 1/4	Knoxville,Tenn. K6
1/4 x 3 1/4	Minnequa,Colo. C10
1/4 x 3 1/4	Portland,Oreg. O4
1/4 x 3 1/2	Fontana,Calif. K1
1/4 x 3 1/2	Knoxville,Tenn. K6
1/4 x 3 1/2	Minnequa,Colo. C10
1/4 x 3 1/2	Portland,Oreg. O4
1/4 x 3 1/2	Seattle N14
1/4 x 3 1/2	Tonawanda,N.Y. B12
1/4 x 3 3/4	Knoxville,Tenn. K6
1/4 x 3 3/4	Tonawanda,N.Y. B12
1/4 x 4	Fontana,Calif. K1
1/4 x 4	Knoxville,Tenn. K6
1/4 x 4	Minnequa,Colo. C10
1/4 x 4	Portland,Oreg. O4
1/4 x 4	Seattle N14
1/4 x 4	Tonawanda,N.Y. B12
1/4 x 4 1/2	Knoxville,Tenn. K6
1/4 x 4 1/2	Minnequa,Colo. C10
1/4 x 4 1/2	Portland,Oreg. O4
1/4 x 5	Knoxville,Tenn. K6
1/4 x 5	Minnequa,Colo. C10
1/4 x 5	Portland,Oreg. O4
1/4 x 5 1/2	Minnequa,Colo. C10
1/4 x 5 1/2	Portland,Oreg. O4
1/4 x 6	Minnequa,Colo. C10
1/4 x 6	Portland,Oreg. O4
1/4–⅜ x 1¾	So.Chicago,Ill. R2
1/4–⅜ x ¾	Pittsburg,Calif. C11
1/4–⅜ x 1⅜	SouthChicago,Ill. R2
1/4–⅜ x 1½	SouthChicago,Ill. R2
1/4–⅜ x 4¼	Marion,O. P11
1/4–⅜ x 4½	Marion,O. P11
1/4–⅜ x 4¾	Marion,O. P11
1/4–⅜ x 5	Marion,O. P11
1/4–½ x 3–6	Buffalo R2
1/4–½ x ⅞	Pittsburg,Calif. C11
1/4–½ x 1	Pittsburg,Calif. C11
1/4–½ x 1	SouthChicago,Ill. R2
1/4–½ x 1	Torrance,Calif. C11
1/4–½ x 1	SouthChicago,Ill. R2
1/4–½ x 1¼	SouthChicago,Ill. R2
1/4–½ x 1½	Torrance,Calif. C11
1/4–½ x 3½–4	Pittsburg,Calif. C11
1/4–⅝ x 1⅛	Pittsburg,Calif. C11

Sizes Produced (inches)	Mill Point, Producer
1/4–⅝ x 1¼	Pittsburg,Calif. C11
1/4–⅝ inc. x ¾	Ind.Harbor,Ind. I-2
1/4–⅝ x ¾–6	KansasCity,Mo. S5
1/4–⅝ x 1⅜	Pittsburg,Calif. C11
1/4–¾ x 1½	Torrance,Calif. C11
1/4–¾ x 1½–3	Pittsburg,Calif. C11
1/4–¾ x 1¾	Torrance,Calif. C11
1/4–1 x 1–4	Emeryville,Calif. J7
1/4–1 x 1–4½	Niles,Calif. P1
1/4–1 x 2	Torrance,Calif. C11
1/4–1 x 2¼	Torrance,Calif. C11
1/4–1 x 2½	Torrance,Calif. C11
1/4–1 x 3	Torrance,Calif. C11
1/4–1 x 3½	Torrance,Calif. C11
1/4–1 x 4	Torrance,Calif. C11
1/4–1 x 4–6	AlabamaCity,Ala. R2
1/4–1 1/16 x 2–2 7/8	So.Chicago,Ill. R2
1/4–1 1/2 x 1/2–6	SanFrancisco B3
1/4–1 1/2 x 3/4–6	Houston S5
1/4–1 1/2 x 2 1/2–2 13/16	So.Chicago,Ill. R2
1/4–1 1/2 x 2 1/2–6	Aliquippa,Pa. J5
1/4–1 1/2 x 3–3 7/16	So.Chicago,Ill. R2
1/4–1 1/2 x 6 1/2–7 1/2	Cleveland R2
1/4–1 3/4 x 2–3 3/16	Duquesne,Pa. U5
1/4–1 3/4 x 2–3 3/16	Gary,Ind. U5
1/4–1 3/4 x 2–3 3/16	Youngstown U5
1/4–2 x 1/2–4 1/2	LosAngeles B3
1/4–2 x 5/8–6	Seattle B3
1/4–2 x 2 5/8	Cleveland R2
1/4–2 x 3 1/2–3 13/16	So.Chicago,Ill. R2
1/4–2 x 4–5	SouthChicago,Ill. R2
1/4–2 5/8 x 2 3/4–2 7/8	Cleveland R2
1/4–2 1/2 x 3–6 1/4	Cleveland R2
1/4–2 7/16 x 5 3/32–6	Youngstown U5
1/4–3 x 3 1/2–5 1/16	Gary,Ind. U5
1/4–3 x 5 3/64–5 1/2	Gary,Ind. U5
1/4–3 x 5 3/32–6	Gary,Ind. U5
1/4–3 1/2 x 3 1/2–5 1/16	Clairton,Pa. U5
1/4–3 1/2 x 3 1/2–5 1/16	Youngstown U5
1/4–3 1/2 x 5 3/64–5 1/2	Clairton,Pa. U5
1/4–3 1/2 x 5 3/64–5 1/2	Youngstown U5
1/4–3 1/2 x 5 3/64–6	Clairton,Pa. U5
1/4–4 x ¾–6	Ecorse,Mich. G5
1/4 x ⅜	Youngstown U5
1/4 x 3/32	Youngstown U5
5/32 x ¾–1½	Buffalo R2
5/32 x 1 7/16–2 9/16	Cleveland R2
5/32 x 1 3/16–3 1/2	Buffalo R2
5/32 x 1 3/4–2 3/4	Fontana,Calif. K1
5/32 x 3	Fontana,Calif. K1
5/32 x 3 1/2	Fontana,Calif. K1
5/32 x 4	Fontana,Calif. K1
5/32 x 4 1/2–5	Fontana,Calif. K1
5/32 x 6	Fontana,Calif. K1
3/16 x ½	Minnequa,Colo. C10
3/16 x ⅝	Knoxville,Tenn. K6
3/16 x ⅝	Minnequa,Colo. C10
3/16 x ⅝–6	Atlanta A11
3/16 x ¾	Knoxville,Tenn. K6
3/16 x ¾	Minnequa,Colo. C10
3/16 x ¾–2	Milton,Pa. B6
3/16 x 7/8–1 1/16	Buffalo R2
3/16 x ⅞	Knoxville,Tenn. K6
3/16 x ⅞	Minnequa,Colo. C10
3/16 x 1	Knoxville,Tenn. K6
3/16 x 1	Minnequa,Colo. C10
3/16 x 1	Seattle N14
3/16 x 1	Tonawanda,N.Y. B12
3/16 x 1–2 1/16	Cleveland R2
3/16 x 1 1/8	Knoxville,Tenn. K6
3/16 x 1 1/8	Minnequa,Colo. C10
3/16 x 1 1/8	Tonawanda,N.Y. B12
3/16 x 1 1/4	Knoxville,Tenn. K6
3/16 x 1 1/4	Minnequa,Colo. C10
3/16 x 1 1/4	Seattle N14
3/16 x 1 1/4	Tonawanda,N.Y. B12
3/16 x 1 3/8	Knoxville,Tenn. K6
3/16 x 1 3/8	Minnequa,Colo. C10
3/16 x 1 3/8	Tonawanda,N.Y. B12
3/16 x 1 1/2	Knoxville,Tenn. K6
3/16 x 1 1/2	Minnequa,Colo. C10
3/16 x 1 1/2	Portland,Oreg. O4
3/16 x 1 1/2	Seattle N14
3/16 x 1 1/2	Tonawanda,N.Y. B12
3/16 x 1 5/8	Knoxville,Tenn. K6
3/16 x 1 5/8	Minnequa,Colo. C10
3/16 x 1 5/8	Portland,Oreg. O4
3/16 x 1 3/4	Knoxville,Tenn. K6
3/16 x 1 3/4	Minnequa,Colo. C10
3/16 x 1 3/4	Portland,Oreg. O4
3/16 x 1 3/4	Seattle N14
3/16 x 1 3/4	Tonawanda,N.Y. B12
3/16 x 1 7/8–2 3/4	Fontana,Calif. K1
3/16 x 2	Knoxville,Tenn. K6
3/16 x 2	Minnequa,Colo. C10
3/16 x 2	Portland,Oreg. O4
3/16 x 2	Seattle N14
3/16 x 2	Tonawanda,N.Y. B12
3/16 x 2–2 1/2	Fontana,Calif. K1
3/16 x 2 1/4	Knoxville,Tenn. K6
3/16 x 2 1/4	Minnequa,Colo. C10
3/16 x 2 1/4	Portland,Oreg. O4
3/16 x 2 1/4	Seattle N14

Sizes Produced (inches)	Mill Point, Producer
3/16 x 2 3/4	Tonawanda,N.Y. B12
3/16 x 2 1/2	Knoxville,Tenn. K6
3/16 x 2 1/2	Minnequa,Colo. C10
3/16 x 2 1/2	Portland,Oreg. O4
3/16 x 2 1/2	Seattle N14
3/16 x 2 1/2	Tonawanda,N.Y. B12
3/16 x 2 3/4	Knoxville,Tenn. K6
3/16 x 2 3/4	Minnequa,Colo. C10
3/16 x 2 3/4	Portland,Oreg. O4
3/16 x 2 3/4	Tonawanda,N.Y. B12
3/16 x 3	Fontana,Calif. K1
3/16 x 3	Knoxville,Tenn. K6
3/16 x 3	Minnequa,Colo. C10
3/16 x 3	Portland,Oreg. O4
3/16 x 3	Seattle N14
3/16 x 3	Tonawanda,N.Y. B12
3/16 x 3–6	Fontana,Calif. K1
3/16 x 3 1/4	Knoxville,Tenn. K6
3/16 x 3 1/4	Minnequa,Colo. C10
3/16 x 3 1/4	Portland,Oreg. O4
3/16 x 3 1/2	Fontana,Calif. K1
3/16 x 3 1/2	Knoxville,Tenn. K6
3/16 x 3 1/2	Minnequa,Colo. C10
3/16 x 3 1/2	Portland,Oreg. O4
3/16 x 3 1/2	Seattle N14
3/16 x 3 1/2	Tonawanda,N.Y. B12
3/16 x 3 3/4	Knoxville,Tenn. K6
3/16 x 3 3/4	Tonawanda,N.Y. B12
3/16 x 4	Fontana,Calif. K1
3/16 x 4	Knoxville,Tenn. K6
3/16 x 4	Minnequa,Colo. C10
3/16 x 4	Portland,Oreg. O4
3/16 x 4	Seattle N14
3/16 x 4	Tonawanda,N.Y. B12
3/16 x 4 1/2	Knoxville,Tenn. K6
3/16 x 4 1/2	Minnequa,Colo. C10
3/16 x 4 1/2	Portland,Oreg. O4
3/16 x 5	Knoxville,Tenn. K6
3/16 x 5	Minnequa,Colo. C10
3/16 x 5	Portland,Oreg. O4
3/16 x 5 1/2	Minnequa,Colo. C10
3/16 x 5 1/2	Portland,Oreg. O4
3/16 x 6	Minnequa,Colo. C10
3/16 x 6	Portland,Oreg. O4
7/32 x 1	Knoxville,Tenn. K6
7/32 x 1	Minnequa,Colo. C10
7/32 x 1	Seattle N14
7/32 x 1	Tonawanda,N.Y. B12
7/32 x 1 1/4	Knoxville,Tenn. K6
7/32 x 1 1/4	Minnequa,Colo. C10
7/32 x 1 1/4	Seattle N14
7/32 x 1 1/4	Tonawanda,N.Y. B12
7/32 x 1 1/2	Knoxville,Tenn. K6
7/32 x 1 1/2	Minnequa,Colo. C10
7/32 x 1 1/2	Portland,Oreg. O4
7/32 x 1 1/2	Seattle N14
7/32 x 1 1/2	Tonawanda,N.Y. B12
7/32 x 1 5/8	Knoxville,Tenn. K6
7/32 x 1 5/8	Minnequa,Colo. C10
7/32 x 1 5/8	Portland,Oreg. O4
7/32 x 1 3/4	Knoxville,Tenn. K6
7/32 x 1 3/4	Minnequa,Colo. C10
7/32 x 1 3/4	Portland,Oreg. O4
7/32 x 1 3/4	Seattle N14
7/32 x 1 3/4	Tonawanda,N.Y. B12
7/32 x 1 7/8–2 3/4	Fontana,Calif. K1
7/32 x 2	Knoxville,Tenn. K6
7/32 x 2	Minnequa,Colo. C10
7/32 x 2	Portland,Oreg. O4
7/32 x 2	Seattle N14
7/32 x 2	Tonawanda,N.Y. B12
7/32 x 2–2 1/2	Fontana,Calif. K1
7/32 x 2 1/4	Knoxville,Tenn. K6
7/32 x 2 1/4	Minnequa,Colo. C10
7/32 x 2 1/4	Portland,Oreg. O4
7/32 x 2 1/4	Seattle N14
7/32 x 2 1/4	Tonawanda,N.Y. B12
7/32 x 2 1/2	Knoxville,Tenn. K6

HOT-ROLLED BARS (Carbon Steel)

(Code number following mill point indicates producing company, key on page 38)

Flats

CONTINUED FROM PRECEDING PAGE

Sizes Produced (inches)	Mill Point, Producer
⅛ x 2½	Minnequa,Colo. C10
⅛ x 2½	Portland,Oreg. O4
⅛ x 2½	Seattle N14
⅛ x 2½	Tonawanda,N.Y. B12
⅛ x 2¾	Knoxville,Tenn. K6
⅛ x 2¾	Minnequa,Colo. C10
⅛ x 2¾	Portland,Oreg. O4
⅛ x 2¾	Tonawanda,N.Y. B12
⅛ x 3	Fontana,Calif. K1
⅛ x 3	Knoxville,Tenn. K6
⅛ x 3	Minnequa,Colo. C10
⅛ x 3	Portland,Oreg. O4
⅛ x 3	Seattle N14
⅛ x 3	Tonawanda,N.Y. B12
⅛ x 3-6	Fontana,Calif. K1
⅛ x 3¼	Knoxville,Tenn. K6
⅛ x 3¼	Minnequa,Colo. C10
⅛ x 3¼	Portland,Oreg. O4
⅛ x 3½	Fontana,Calif. K1
⅛ x 3½	Knoxville,Tenn. K6
⅛ x 3½	Minnequa,Colo. C10
⅛ x 3½	Portland,Oreg. O4
⅛ x 3½	Seattle N14
⅛ x 3½	Tonawanda,N.Y. B12
⅛ x 3¾	Knoxville,Tenn. K6
⅛ x 3¾	Tonawanda,N.Y. B12
⅛ x 4	Fontana,Calif. K1
⅛ x 4	Knoxville,Tenn. K6
⅛ x 4	Minnequa,Colo. C10
⅛ x 4	Portland,Oreg. O4
⅛ x 4	Seattle N14
⅛ x 4	Tonawanda,N.Y. B12
⅛ x 4	Knoxville,Tenn. K6
⅛ x 4½	Minnequa,Colo. C10
⅛ x 4½	Portland,Oreg. O4
⅛ x 4½-5	Fontana,Calif. K1
⅛ x 5	Knoxville,Tenn. K6
⅛ x 5	Minnequa,Colo. C10
⅛ x 5	Portland,Oreg. O4
⅛ x 5½	Minnequa,Colo. C10
⅛ x 5½	Portland,Oreg. O4
⅛ x 6	Fontana,Calif. K1
⅛ x 6	Minnequa,Colo. C10
⅛ x 6	Portland,Oreg. O4
⅛-1 x 1¾-1½	So.Chicago,Ill. B2
⅛-1 x 4½	Torrance,Calif. C11
⅛-1 x 5	Torrance,Calif. C11
⅛-1 x 6	Torrance,Calif. C11
⅛-1 x 7⅜-8	Cleveland R2
⅛ x ⅝	Knoxville,Tenn. K6
⅛ x ¾	Knoxville,Tenn. K6
⅛ x ¾	Minnequa,Colo. C10
⅛ x ¾-2⅜	Cleveland R2
⅛ x ¾-3¼	Atlanta A11
⅛ x ⅞	Knoxville,Tenn. K6
⅛ x ⅞	Minnequa,Colo. C10
⅛ x 1	Knoxville,Tenn. K6
⅛ x 1	Minnequa,Colo. C10
⅛ x 1-1½	Milton,Pa. B6
⅛ x 1⅛-3¼	Buffalo R2
⅛ x 1⅛	Knoxville,Tenn. K6
⅛ x 1⅛	Minnequa,Colo. C10
⅛ x 1¼	Knoxville,Tenn. K6
⅛ x 1¼	Minnequa,Colo. C10
⅛ x 1⅜	Knoxville,Tenn. K6
⅛ x 1⅜	Minnequa,Colo. C10
⅛ x 1½	Knoxville,Tenn. K6
⅛ x 1½	Minnequa,Colo. C10
⅛ x 1½	Portland,Oreg. O4
⅛ x 1⅝	Knoxville,Tenn. K6
⅛ x 1⅝	Minnequa,Colo. C10
⅛ x 1⅝	Portland,Oreg. O4
⅛ x 1¾	Knoxville,Tenn. K6
⅛ x 1¾	Minnequa,Colo. C10
⅛ x 1¾	Portland,Oreg. O4
⅛ x 2	Knoxville,Tenn. K6
⅛ x 2	Minnequa,Colo. C10
⅛ x 2	Portland,Oreg. O4
⅛ x 2¼	Knoxville,Tenn. K6
⅛ x 2¼	Minnequa,Colo. C10
⅛ x 2¼	Portland,Oreg. O4
⅛ x 2½	Knoxville,Tenn. K6
⅛ x 2½	Minnequa,Colo. C10
⅛ x 2½	Portland,Oreg. O4
⅛ x 2¾	Knoxville,Tenn. K6
⅛ x 2¾	Minnequa,Colo. C10
⅛ x 2¾	Portland,Oreg. O4
⅛ x 3	Knoxville,Tenn. K6
⅛ x 3	Minnequa,Colo. C10
⅛ x 3	Portland,Oreg. O4
⅛ x 3¼	Knoxville,Tenn. K6
⅛ x 3⅜-6	Buffalo R2
⅛ x 3½	Knoxville,Tenn. K6
⅛ x 3½	Minnequa,Colo. C10
⅛ x 3½	Portland,Oreg. O4
⅛ x 3¾	Knoxville,Tenn. K6
⅛ x 4	Knoxville,Tenn. K6
⅛ x 4	Minnequa,Colo. C10
⅛ x 4	Portland,Oreg. O4
⅛ x 4½	Knoxville,Tenn. K6
⅛ x 4½	Minnequa,Colo. C10
⅛ x 4½	Portland,Oreg. O4
⅛ x 5	Knoxville,Tenn. K6
⅛ x 5	Minnequa,Colo. C10
⅛ x 5	Portland,Oreg. O4
⅛ x 5½	Minnequa,Colo. C10

Sizes Produced (inches)	Mill Point, Producer
⅛ x 5½	Portland,Oreg. O4
⅛ x 6	Minnequa,Colo. C10
⅛ x 6	Portland,Oreg. O4
⅛-1 x 1½	SouthChicago,Ill. R2
⅛-2½ x 1/16-6	Lackawanna,N.Y. B2
¼ x 1⅛-3¼	Buffalo R2
¼ x 3/16-6	Cleveland R2
¼ x ⅝	Knoxville,Tenn. K6
¼ x ⅝-1⅞	Cleveland R2
¼ x ¾	Knoxville,Tenn. K6
¼ x ¾	Minnequa,Colo. C10
¼ x ¾-6	Atlanta A11
¼ x ⅞	Knoxville,Tenn. K6
¼ x ⅞	Minnequa,Colo. C10
¼ x ⅞	SouthChicago,Ill. R2
¼ x 1	Knoxville,Tenn. K6
¼ x 1	Minnequa,Colo. C10
¼ x 1	Seattle N14
¼ x 1 1/16-2⅜	Buffalo R2
¼ x 1⅛	Knoxville,Tenn. K6
¼ x 1⅛	Minnequa,Colo. C10
¼ x 1⅛-1 1/16	Milton,Pa. B6
¼ x 1¼	Knoxville,Tenn. K6
¼ x 1¼	Minnequa,Colo. C10
¼ x 1¼	Seattle N14
¼ x 1⅜	Knoxville,Tenn. K6
¼ x 1⅜	Minnequa,Colo. C10
¼ x 1⅜	Portland,Oreg. O4
¼ x 1½	Knoxville,Tenn. K6
¼ x 1½	Minnequa,Colo. C10
¼ x 1½	Portland,Oreg. O4
¼ x 1½	Seattle N14
¼ x 1½	Buffalo R2
¼ x 1½-2⅜	Knoxville,Tenn. K6
¼ x 1⅝	Minnequa,Colo. C10
¼ x 1⅝-1 1/16	Milton,Pa. B6
¼ x 1¾	Knoxville,Tenn. K6
¼ x 1¾	Minnequa,Colo. C10
¼ x 1¾	Seattle N14
¼ x 1⅞	Knoxville,Tenn. K6
¼ x 1⅞	Minnequa,Colo. C10
¼ x 1⅞	Portland,Oreg. O4
¼ x 2	Knoxville,Tenn. K6
¼ x 2	Minnequa,Colo. C10
¼ x 2	Portland,Oreg. O4
¼ x 2	Seattle N14
¼ x 2-2½	Knoxville,Tenn. K6
¼ x 2¼	Minnequa,Colo. C10
¼ x 2¼	Portland,Oreg. O4
¼ x 2¼	Seattle N14
¼ x 2¼	Tonawanda,N.Y. B12
¼ x 2½	Knoxville,Tenn. K6
¼ x 2½	Minnequa,Colo. C10
¼ x 2½	Portland,Oreg. O4
¼ x 2½	Seattle N14
¼ x 2½	Tonawanda,N.Y. B12
¼ x 2¾	Knoxville,Tenn. K6
¼ x 2¾	Minnequa,Colo. C10
¼ x 2¾	Portland,Oreg. O4
¼ x 2¾	Seattle N14
¼ x 2¾	Tonawanda,N.Y. B12
¼ x 2 1/16-8	Buffalo R2
¼ x 3	Fontana,Calif. K1
¼ x 3	Knoxville,Tenn. K6
¼ x 3	Minnequa,Colo. C10
¼ x 3	Portland,Oreg. O4
¼ x 3	Seattle N14
¼ x 3-6	Fontana,Calif. K1
¼ x 3¼	Knoxville,Tenn. K6
¼ x 3¼	Minnequa,Colo. C10
¼ x 3¼	Portland,Oreg. O4
¼ x 3½	Fontana,Calif. K1
¼ x 3½	Knoxville,Tenn. K6
¼ x 3½	Minnequa,Colo. C10
¼ x 3½	Portland,Oreg. O4
¼ x 3½	Seattle N14
¼ x 3¾	Knoxville,Tenn. K6
¼ x 4	Fontana,Calif. K1
¼ x 4	Knoxville,Tenn. K6
¼ x 4	Minnequa,Colo. C10
¼ x 4	Portland,Oreg. O4
¼ x 4	Seattle N14
¼ x 4½	Knoxville,Tenn. K6
¼ x 4½	Minnequa,Colo. C10
¼ x 4½	Portland,Oreg. O4
¼ x 4½-5	Fontana,Calif. K1
¼ x 5	Knoxville,Tenn. K6
¼ x 5	Minnequa,Colo. C10
¼ x 5	Portland,Oreg. O4
¼ x 5½	Minnequa,Colo. C10
¼ x 5½	Portland,Oreg. O4
¼ x 6	Fontana,Calif. K1
¼ x 6	Minnequa,Colo. C10
¼ x 6	Portland,Oreg. O4
¼-1 x 1¼	SouthChicago,Ill. R2
¼-1 x 1¾-2⅛	Cleveland R2
¼-1 x 1⅞-2⅜	Buffalo R2
¼ x ⅜-1⅛	Cleveland R2
⅜ x ⅜	Knoxville,Tenn. K6
⅜ x ⅜	Minnequa,Colo. C10
⅜ x ⅝	Knoxville,Tenn. K6
⅜ x ⅝	So.Chicago,Ill. R2
⅜ x 1	Knoxville,Tenn. K6
⅜ x 1	Minnequa,Colo. C10
⅜ x 1	Seattle N14
⅜ x 1-2⅜	Buffalo R2
⅜ x 1-6	Atlanta A11
⅜ x 1⅛	Knoxville,Tenn. K6
⅜ x 1¼	Knoxville,Tenn. K6
⅜ x 1¼	Minnequa,Colo. C10
⅜ x 1¼	Seattle N14
⅜ x 1⅜	Knoxville,Tenn. K6
⅜ x 1⅜	Fontana,Calif. K1
⅜ x 1½	Knoxville,Tenn. K6
⅜ x 1½	Minnequa,Colo. C10
⅜ x 1½	Portland,Oreg. O4
⅜ x 1½	Seattle N14
⅜ x 1½	Tonawanda,N.Y. B12
⅜ x 1⅝	Knoxville,Tenn. K6
⅜ x 1⅝	Fontana,Calif. K1
⅜ x 1¾	Knoxville,Tenn. K6
⅜ x 1¾	Minnequa,Colo. C10
⅜ x 1¾	Portland,Oreg. O4
⅜ x 1¾	Seattle N14
⅜ x 1¾	Tonawanda,N.Y. B12
⅜ x 1¾-2⅜	Fontana,Calif. K1
⅜ x 2	Knoxville,Tenn. K6
⅜ x 2	Minnequa,Colo. C10
⅜ x 2	Portland,Oreg. O4
⅜ x 2	Seattle N14
⅜ x 2-2½	Fontana,Calif. K1
⅜ x 2¼	Knoxville,Tenn. K6
⅜ x 2¼	Minnequa,Colo. C10
⅜ x 2¼	Portland,Oreg. O4
⅜ x 2¼	Seattle N14
⅜ x 2¼	Tonawanda,N.Y. B12
⅜ x 2½	Knoxville,Tenn. K6
⅜ x 2½	Minnequa,Colo. C10
⅜ x 2½	Portland,Oreg. O4
⅜ x 2½	Seattle N14
⅜ x 2½	Tonawanda,N.Y. B12
⅜ x 2¾	Knoxville,Tenn. K6
⅜ x 2¾	Minnequa,Colo. C10
⅜ x 2¾	Portland,Oreg. O4
⅜ x 2¾	Seattle N14
⅜ x 2¾	Tonawanda,N.Y. B12
⅜ x 3	Fontana,Calif. K1
⅜ x 3	Knoxville,Tenn. K6
⅜ x 3	Minnequa,Colo. C10
⅜ x 3	Portland,Oreg. O4
⅜ x 3	Seattle N14
⅜ x 3-6	Fontana,Calif. K1
⅜ x 3¼	Knoxville,Tenn. K6
⅜ x 3¼	Minnequa,Colo. C10
⅜ x 3¼	Portland,Oreg. O4
⅜ x 3½	Fontana,Calif. K1
⅜ x 3½	Knoxville,Tenn. K6
⅜ x 3½	Minnequa,Colo. C10
⅜ x 3½	Portland,Oreg. O4
⅜ x 3½	Seattle N14
⅜ x 3¾	Knoxville,Tenn. K6
⅜ x 4	Fontana,Calif. K1
⅜ x 4	Knoxville,Tenn. K6
⅜ x 4	Minnequa,Colo. C10
⅜ x 4	Portland,Oreg. O4
⅜ x 4	Seattle N14
⅜ x 4½	Knoxville,Tenn. K6
⅜ x 4½	Minnequa,Colo. C10
⅜ x 4½	Portland,Oreg. O4
⅜ x 4½-5	Fontana,Calif. K1
⅜ x 5	Knoxville,Tenn. K6
⅜ x 5	Minnequa,Colo. C10
⅜ x 5	Portland,Oreg. O4
⅜ x 5½	Minnequa,Colo. C10
⅜ x 5½	Portland,Oreg. O4
⅜ x 6	Minnequa,Colo. C10
⅜ x 6	Portland,Oreg. O4
⅜-2¼ x 1⅛-3⅜	Pittsburgh J5
⅜ x ⅝-1⅞	Cleveland R2
⅜ x 1-2⅜	Buffalo R2
⅜ x ¾-1⅞	Cleveland R2
⅜ x 1-1⅝	Buffalo R2
⅜ x 1⅛-3¼	Atlanta A11
⅜ x 1 1/16-8	Buffalo R2
⅜-1½ x 1½	Cleveland R2
⅜ x ⅝-1⅞	Cleveland R2
⅜ x 1-1⅝	Buffalo R2
⅜ x 1 1/16-8	Cleveland R2
⅜ x ⅝-1⅞	Cleveland R2
⅜ x ¾	Knoxville,Tenn. K6
⅜ x ⅞	So.Chicago,Ill. R2
⅜ x 1	Knoxville,Tenn. K6
⅜ x 1	Minnequa,Colo. C10
⅜ x 1-1½	Buffalo R2
⅜ x 1⅛	Knoxville,Tenn. K6
⅜ x 1¼	Knoxville,Tenn. K6
⅜ x 1¼	Minnequa,Colo. C10
⅜ x 1⅜	Knoxville,Tenn. K6

Sizes Produced (inches)	Mill Point, Producer
⅜ x 1⅜-6	Atlanta A11
⅜ x 1½	Fontana,Calif. K1
⅜ x 1½	Knoxville,Tenn. K6
⅜ x 1½	Minnequa,Colo. C10
⅜ x 1½	Portland,Oreg. O4
⅜ x 1½	Seattle N14
⅜ x 1½-8	Buffalo R2
⅜ x 1⅝	Knoxville,Tenn. K6
⅜ x 1¾	Fontana,Calif. K1
⅜ x 1¾	Knoxville,Tenn. K6
⅜ x 1¾	Minnequa,Colo. C10
⅜ x 1¾	Portland,Oreg. O4
⅜ x 1¾	Seattle N14
⅜ x 2	Knoxville,Tenn. K6
⅜ x 2	Minnequa,Colo. C10
⅜ x 2	Portland,Oreg. O4
⅜ x 2	Seattle N14
⅜ x 2-2½	Fontana,Calif. K1
⅜ x 2¼	Knoxville,Tenn. K6
⅜ x 2¼	Minnequa,Colo. C10
⅜ x 2¼	Portland,Oreg. O4
⅜ x 2¼	Seattle N14
⅜ x 2½	Knoxville,Tenn. K6
⅜ x 2½	Minnequa,Colo. C10
⅜ x 2½	Portland,Oreg. O4
⅜ x 2½	Seattle N14
⅜ x 2¾	Knoxville,Tenn. K6
⅜ x 2¾	Minnequa,Colo. C10
⅜ x 2¾	Portland,Oreg. O4
⅜ x 2¾	Seattle N14
⅜ x 3	Knoxville,Tenn. K6
⅜ x 3	Minnequa,Colo. C10
⅜ x 3	Portland,Oreg. O4
⅜ x 3	Seattle N14
⅜ x 3-6	Fontana,Calif. K1
⅜ x 3¼	Knoxville,Tenn. K6
⅜ x 3¼	Minnequa,Colo. C10
⅜ x 3¼	Portland,Oreg. O4
⅜ x 3½	Fontana,Calif. K1
⅜ x 3½	Knoxville,Tenn. K6
⅜ x 3½	Minnequa,Colo. C10
⅜ x 3½	Portland,Oreg. O4
⅜ x 3½	Seattle N14
⅜ x 3¾	Knoxville,Tenn. K6
⅜ x 4	Fontana,Calif. K1
⅜ x 4	Knoxville,Tenn. K6
⅜ x 4	Minnequa,Colo. C10
⅜ x 4	Portland,Oreg. O4
⅜ x 4	Seattle N14
⅜ x 4½	Knoxville,Tenn. K6
⅜ x 4½	Minnequa,Colo. C10
⅜ x 4½	Portland,Oreg. O4
⅜ x 4½-5	Fontana,Calif. K1
⅜ x 5	Knoxville,Tenn. K6
⅜ x 5	Minnequa,Colo. C10
⅜ x 5	Portland,Oreg. O4
⅜ x 5½	Minnequa,Colo. C10
⅜ x 5½	Portland,Oreg. O4
⅜ x 6	Minnequa,Colo. C10
⅜ x 6	Portland,Oreg. O4
⅜ x 6	Seattle N14
⅜ x 6½-8	Cleveland R2
⅜ x 6½-8	Cleveland R2
⅜ x 1 1/16-1⅝	Buffalo R2
⅜-1⅛ x 1½-8	Buffalo R2
⅞ x 1	Knoxville,Tenn. K6
⅞ x 1¼	Knoxville,Tenn. K6
⅞ x 1⅜	Knoxville,Tenn. K6
⅞ x 1½	Knoxville,Tenn. K6
⅞ x 1½	Minnequa,Colo. C10
⅞ x 1½	Seattle N14
⅞ x 1½-6	Atlanta A11
⅞ x 1⅝	Knoxville,Tenn. K6
⅞ x 1¾	Knoxville,Tenn. K6
⅞ x 1¾	Minnequa,Colo. C10
⅞ x 1¾	Seattle N14
⅞ x 2	Knoxville,Tenn. K6
⅞ x 2	Minnequa,Colo. C10
⅞ x 2	Portland,Oreg. O4
⅞ x 2	Seattle N14
⅞ x 2-2½	Fontana,Calif. K1
⅞ x 2¼	Knoxville,Tenn. K6
⅞ x 2¼	Minnequa,Colo. C10
⅞ x 2¼	Portland,Oreg. O4
⅞ x 2¼	Seattle N14
⅞ x 2½	Knoxville,Tenn. K6
⅞ x 2½	Minnequa,Colo. C10
⅞ x 2½	Portland,Oreg. O4
⅞ x 2½	Seattle N14
⅞ x 2¾	Knoxville,Tenn. K6
⅞ x 2¾	Minnequa,Colo. C10
⅞ x 2¾	Portland,Oreg. O4
⅞ x 3	Knoxville,Tenn. K6
⅞ x 3	Minnequa,Colo. C10
⅞ x 3	Portland,Oreg. O4
⅞ x 3	Seattle N14
⅞ x 3-6	Fontana,Calif. K1
⅞ x 3¼	Knoxville,Tenn. K6
⅞ x 3¼	Minnequa,Colo. C10
⅞ x 3¼	Portland,Oreg. O4
⅞ x 3½	Fontana,Calif. K1
⅞ x 3½	Knoxville,Tenn. K6
⅞ x 3½	Minnequa,Colo. C10
⅞ x 3½	Portland,Oreg. O4
⅞ x 3½	Seattle N14
⅞ x 3¾	Knoxville,Tenn. K6
⅞ x 4	Fontana,Calif. K1
⅞ x 4	Knoxville,Tenn. K6
⅞ x 4	Minnequa,Colo. C10
⅞ x 4	Portland,Oreg. O4
⅞ x 4	Seattle N14
⅞ x 4½	Knoxville,Tenn. K6
⅞ x 4½	Minnequa,Colo. C10
⅞ x 4½	Portland,Oreg. O4
⅞ x 4½-5	Fontana,Calif. K1
⅞ x 5	Knoxville,Tenn. K6
⅞ x 5	Minnequa,Colo. C10
⅞ x 5	Portland,Oreg. O4
⅞ x 5½	Minnequa,Colo. C10
⅞ x 5½	Portland,Oreg. O4
⅞ x 6	Minnequa,Colo. C10
⅞ x 6	Portland,Oreg. O4
⅞ x 6	Seattle N14
⅞ x 6½-8	Cleveland R2
⅞ x 6½-8	Cleveland R2
⅞ x 1 1/16-1⅝	Buffalo R2
⅞-1⅛ x 1½-8	Buffalo R2
1 x 1¼	Knoxville,Tenn. K6
1 x 1⅜	Knoxville,Tenn. K6
1 x 1½	Knoxville,Tenn. K6
1 x 1½	Minnequa,Colo. C10
1 x 1½	Portland,Oreg. O4
1 x 1½	Seattle N14
1 x 1½-6	Atlanta A11
1 x 1⅝	Knoxville,Tenn. K6
1 x 1¾	Knoxville,Tenn. K6
1 x 1¾	Minnequa,Colo. C10
1 x 1¾	Seattle N14
1 x 2	Knoxville,Tenn. K6
1 x 2	Minnequa,Colo. C10
1 x 2	Portland,Oreg. O4
1 x 2	Seattle N14
1 x 2-2½	Fontana,Calif. K1
1 x 2¼	Knoxville,Tenn. K6
1 x 2¼	Minnequa,Colo. C10
1 x 2¼	Portland,Oreg. O4
1 x 2¼	Seattle N14
1 x 2½	Knoxville,Tenn. K6
1 x 2½	Minnequa,Colo. C10
1 x 2½	Portland,Oreg. O4
1 x 2½	Seattle N14
1 x 2¾	Knoxville,Tenn. K6
1 x 2¾	Minnequa,Colo. C10
1 x 2¾	Portland,Oreg. O4
1 x 2¾	Seattle N14
1 x 3	Knoxville,Tenn. K6
1 x 3	Minnequa,Colo. C10
1 x 3	Portland,Oreg. O4
1 x 3	Seattle N14
1 x 3-6	Fontana,Calif. K1
1 x 3¼	Knoxville,Tenn. K6
1 x 3¼	Minnequa,Colo. C10
1 x 3¼	Portland,Oreg. O4
1 x 3½	Fontana,Calif. K1
1 x 3½	Knoxville,Tenn. K6
1 x 3½	Minnequa,Colo. C10
1 x 3½	Portland,Oreg. O4
1 x 3½	Seattle N14
1 x 3¾	Knoxville,Tenn. K6
1 x 4	Fontana,Calif. K1
1 x 4	Knoxville,Tenn. K6
1 x 4	Minnequa,Colo. C10
1 x 4	Portland,Oreg. O4
1 x 4	Seattle N14
1 x 4½	Knoxville,Tenn. K6
1 x 4½	Minnequa,Colo. C10
1 x 4½	Portland,Oreg. O4
1 x 4½-5	Fontana,Calif. K1
1 x 5	Knoxville,Tenn. K6
1 x 5	Minnequa,Colo. C10
1 x 5	Portland,Oreg. O4
1 x 5½	Minnequa,Colo. C10
1 x 5½	Portland,Oreg. O4
1 x 6	Fontana,Calif. K1
1 x 6	Minnequa,Colo. C10
1 x 6	Portland,Oreg. O4
1-2½ x 2¼	Cleveland R2
1-2 x 2¼-2⅝	Cleveland R2
1-2¼ x 2½	Cleveland R2
1-4 x ⅝-6	Ecorse,Mich. G5
1⅛ x 1½-2¾	Buffalo R2
1⅛ x 2 1/16-8	Buffalo R2
1⅛ x ⅝-1⅞	Cleveland R2
1⅛ x 1-3¼	Atlanta A11
1⅛ x 1½-2⅝	Buffalo R2

HOT-ROLLED BARS (Carbon Steel)

(Code number following mill point indicates producing company, key on page 38)

Flats

CONTINUED FROM PRECEDING PAGE

Sizes Produced (inches)	Mill Point, Producer
⅞ x 4	Knoxville,Tenn. K6
⅞ x 4	Minnequa,Colo. C10
⅞ x 4	Portland,Oreg. O4
⅞ x 4	Seattle N14
⅞ x 4	Knoxville,Tenn. K6
⅞ x 4½	Minnequa,Colo. C10
⅞ x 4½	Portland,Oreg. O4
⅞ x 4½–5	Fontana,Calif. K1
⅞ x 5	Knoxville,Tenn. K6
⅞ x 5	Minnequa,Colo. C10
⅞ x 5	Portland,Oreg. O4
⅞ x 5½	Knoxville,Tenn. K6
⅞ x 5½	Minnequa,Colo. C10
⅞ x 5½	Portland,Oreg. O4
⅞ x 6	Knoxville,Tenn. K6
⅞ x 6	Minnequa,Colo. C10
⅞ x 6	Portland,Oreg. O4
1 x 1¼	Knoxville,Tenn. K6
1 x 1⅜	Knoxville,Tenn. K6
1 x 1½	Knoxville,Tenn. K6
1 x 1½	Minnequa,Colo. C10
1 x 1½	Portland,Oreg. O4
1 x 1½	Seattle N14
1 x 1½–6	Atlanta A11
1 x 1⅝	Knoxville,Tenn. K6
1 x 1¾	Knoxville,Tenn. K6
1 x 1¾	Minnequa,Colo. C10
1 x 1¾	Seattle N14
1 x 2	Knoxville,Tenn. K6
1 x 2	Minnequa,Colo. C10
1 x 2	Portland,Oreg. O4
1 x 2	Seattle N14
1 x 2–2½	Fontana,Calif. K1
1 x 2¼	Knoxville,Tenn. K6
1 x 2¼	Minnequa,Colo. C10
1 x 2¼	Portland,Oreg. O4
1 x 2¼	Seattle N14
1 x 2½	Knoxville,Tenn. K6
1 x 2½	Minnequa,Colo. C10
1 x 2½	Portland,Oreg. O4
1 x 2½	Seattle N14
1 x 2¾	Knoxville,Tenn. K6
1 x 2¾	Minnequa,Colo. C10
1 x 2¾	Portland,Oreg. O4
1 x 3	Knoxville,Tenn. K6
1 x 3	Minnequa,Colo. C10
1 x 3	Portland,Oreg. O4
1 x 3	Seattle N14
1 x 3–6	Fontana,Calif. K1
1 x 3¼	Knoxville,Tenn. K6
1 x 3½	Knoxville,Tenn. K6
1 x 3½	Minnequa,Colo. C10
1 x 3½	Portland,Oreg. O4
1 x 3¾	Seattle N14
1 x 3¾	Knoxville,Tenn. K6
1 x 4	Fontana,Calif. K1
1 x 4	Knoxville,Tenn. K6
1 x 4	Minnequa,Colo. C10
1 x 4	Portland,Oreg. O4
1 x 4	Seattle N14
1 x 4½	Knoxville,Tenn. K6
1 x 4½	Minnequa,Colo. C10
1 x 4½	Portland,Oreg. O4
1 x 4½–5	Fontana,Calif. K1
1 x 5	Knoxville,Tenn. K6
1 x 5	Minnequa,Colo. C10
1 x 5	Portland,Oreg. O4
1 x 5½	Knoxville,Tenn. K6
1 x 5½	Minnequa,Colo. C10
1 x 5½	Portland,Oreg. O4
1 x 6	Knoxville,Tenn. K6
1 x 6	Minnequa,Colo. C10
1 x 6	Portland,Oreg. O4
1⅛ x 1½	Knoxville,Tenn. K6
1⅛ x 1⅝	Knoxville,Tenn. K6
1⅛ x 1¾	Knoxville,Tenn. K6
1⅛ x 2	Minnequa,Colo. C10
1⅛ x 2	Knoxville,Tenn. K6
1⅛ x 2¼	Minnequa,Colo. C10
1⅛ x 2½	Knoxville,Tenn. K6
1⅛ x 2½	Minnequa,Colo.C10
1⅛ x 2¾	Knoxville,Tenn. K6
1⅛ x 3	Knoxville,Tenn. K6
1⅛ x 3	Minnequa,Colo. C10
1⅛ x 3¼	Knoxville,Tenn. K6
1⅛ x 3½	Knoxville,Tenn. K6
1⅛ x 3½	Minnequa,Colo. C10
1⅛ x 3¾	Knoxville,Tenn. K6
1⅛ x 4	Knoxville,Tenn. K6
1⅛ x 4	Minnequa,Colo. C10
1⅛ x 4½	Knoxville,Tenn. K6
1⅛ x 4½	Minnequa,Colo. C10
1⅛ x 5	Knoxville,Tenn. K6
1⅛ x 5	Minnequa,Colo. C10
1⅛ x 5½	Knoxville,Tenn. K6
1⅛ x 5½	Minnequa,Colo. C10
1⅛ x 6	Knoxville,Tenn. K6
1⅛ x 6	Minnequa,Colo. C10
1¼–2⅜ x 2¼–3¼	Gary,Ind. U5
1¼–2⅜ x 2¼–3¼	Youngstown U5
1¼ x 2¾–8	Buffalo R2
2 x 2½	Knoxville,Tenn. K6
2 x 2½	Minnequa,Colo. C10
2 x 2¾	Knoxville,Tenn. K6
2 x 3	Knoxville,Tenn. K6
2 x 3	Minnequa,Colo. C10
2 x 3¼–8	Buffalo R2
2 x 3½	Knoxville,Tenn. K6
2 x 3½	Knoxville,Tenn. K6
2 x 3½	Minnequa,Colo. C10
2 x 3½	Knoxville,Tenn. K6
2 x 4	Knoxville,Tenn. K6
2 x 4	Minnequa,Colo. C10
2 x 4½	Knoxville,Tenn. K6
2 x 4½	Minnequa,Colo. C10
2 x 5	Knoxville,Tenn. K6
2 x 5	Minnequa,Colo. C10
2 x 5½	Knoxville,Tenn. K6
2 x 5½	Mt. nequa,Colo. C10
2 x 6	Knoxville,Tenn. K6
2 x 6	Minnequa,Colo. C10
2½ x 3–5	Minnequa,Colo. C10

Rounds

Sizes Min.-Max. (inches)	Mill Point, Producer
⅛–3½	Tacony,Philadelphia D4
⅛–5½	Minnequa,Colo. C10
¼–½	Sterling,Ill. N15
¼–1⅜	Atlanta A11
¼–2	Ft. Worth,Tex. T4
¼–2	KansasCity,Mo. S5
¼–4	Houston S5
7/16–3½	IndianaHarbor,Ind. I-2
7/16–3½	Buffalo R2
7/16–1⅛	Williamsport,Pa. S19
⅜–1¼	Tonawanda,N.Y. B12
⅜–2	Alton,Ill. L1
⅜–2	Emeryville,Calif. J7
⅜–2	LosAngeles B3
⅜–2	Madison,Ill. L1
⅜–2	Pittsburg,Calif. C11
⅜–2	Seattle N14
⅜–3¼	Youngstown U5
⅜–3½	Cleveland R2
⅜–3½	SanFrancisco B3
⅜–3½	Torrance,Calif. C11
⅜–3¾	Seattle L3
⅜–4	Knoxville,Tenn. K6
⅜–4⅛	Lackawanna,N.Y. B2
⅜–4½	Ecorse,Mich. G5
⅜–4½	SouthChicago,Ill. W14
⅜–6¼	Gary,Ind. U5
⅜–8	Duquesne,Pa. U5
⅜–8	Johnstown,Pa. B2
⅜–9½	SouthChicago,Ill. R2
7/16–1¼	Milton,Pa. B6
7/16–2½	AlabamaCity,Ala. R2
7/16–4	Niles,Calif. P1
7/16–4½	Pittsburgh J5
½–1⅝	Lebanon,Pa. B2
½–3	Portland,Oreg. O4
½–3¼	Fontana,Calif. K1
½–4½	Economy,Pa. B14
½–3⅝	Youngstown R2
½–5	Marion,O. P11
½–5	Detroit R7
1½–5	SouthChicago,Ill. U5
2–6	Warren,O. C17

Hexagons

¼–1⅝	Tacony,Philadelphia D4
⅜–1⅛	SouthChicago,Ill. R2
⅜–2⅛	Johnstown,Pa. B2
⅜–2⅛	Ecorse,Mich. G5
⅜–3⅛	Gary,Ind. U5
⅜–3¼	Youngstown U5
7/16–1⅛	IndianaHarbor,Ind. I-2
7/16–2⅛	Pittsburgh J5
½–2⅛	Cleveland R2
½–2⅛	Youngstown R2
⅝–1⅛	Lackawanna,N.Y. B2
⅝–2	Detroit R7
⅝–1½	Ft. Worth,Tex. T4
⅝–1¼	Pittsburg,Calif. C11
⅝–1⅜	Minnequa,Colo. C10
1⅛ only	Knoxville,Tenn. K6

Half Ovals

⅛ x ⅛	Atlanta A11
⅛ x ⅛ to 4x¾	Johnstown,Pa. B2
⅛ x ¼ thru 1¼ x ⅜	Alton,Ill. L1
⅜ x ⅛	Atlanta A11
⅜ x ⅛	Youngstown U5
¼ x ⅛	Atlanta A11
¼ x ⅛	Gary,Ind. U5
¼ x ⅛	Youngstown U5
⅜ x ⅛	Atlanta A11
⅜ x ¼	Atlanta A11
1x¼	Gary,Ind. U5
1x¼	Youngstown U5
1 ⅛ x ¼	Atlanta A11
1 ⅛ x ¼	Youngstown U5
1 ¼ x ⅛	Atlanta A11
1 ¼ x ⅜	Gary,Ind. U5
1 ¼ x ⅜	Youngstown U5
1 ⅜ x ¼	Youngstown U5
1 ½ x ⅜	Gary,Ind. U5
1 ½ x ⅜	Youngstown U5
1 ½ x ⅜	Atlanta A11
1 ½ x ⅜	Gary,Ind. U5
1 ½ x ⅜	SanFrancisco B3
1 ½ x ⅜	Youngstown U5
1 ⅝ x ½	IndianaHarbor,Ind. I-2
1 ⅝ x ⅜	IndianaHarbor,Ind. I-2
1 ¾ x ⅜	Youngstown U5
1 ¾ x ⅜	Atlanta A11
1 ¾ x ⅜	SanFrancisco B3
1 ¾ x ⅜	Youngstown U5
2x ⅜	Youngstown U5
2x ½	Atlanta A11
2x ½	IndianaHarbor,Ind. I-2
2x ½	Youngstown U5
2 ½ x ⅝	Youngstown U5

Squares

Sizes Min.-Max. (inches)	Mill Point, Producer
⅛–2	Tacony,Philadelphia D4
¼–1¼	Atlanta A11
¼–4½	Minnequa,Colo. C10
⅜–1	KansasCity,Mo. S5
⅜–1	Pittsburg,Calif. C11
⅜–1	Torrance,Calif. C11
⅜–1¼	Tonawanda,N.Y. B12
⅜–1⅜	Youngstown U5
⅜–1½	LosAngeles B3
⅜–1½	Ft. Worth,Tex. T4
7/16–1¼	Seattle N14
⅜–2	IndianaHarbor,Ind. I-2
⅜–2	Seattle B3
⅜–2½	Johnstown,Pa. B2
⅜–2½	Lackawanna,N.Y. B2
⅜–3	SanFrancisco B3
⅜–3½	Knoxville,Tenn. K6
⅜–4	Ecorse,Mich. G5
⅜–4⅛	Gary,Ind. U5
7/16–2⅛	SouthChicago,Ill. R2
7/16–2⅛	Cleveland R2
½–1	Houston S5
½–1	Milton,Pa. B6
½–1	Portland,Oreg. O4
½–2½	AlabamaCity,Ala. R2
½–2¾	Fontana,Calif. K1
½–4	Economy,Pa. B14
⅝–1¼	Marion,O. P11
⅝–2¼	Niles,Calif. P1
⅝–3	SouthChicago,Ill. W14
⅝–5½	Duquesne,Pa. U5
⅝–2½	Pittsburgh J5
1⅛–2⅞	Buffalo R2

Squares
ROUND CORNERED

⅜–⅝	Youngstown U5
⅜–3¾	Johnstown,Pa. B2
⅜–4¼	Ecorse,Mich. G5
½–1	Portland,Oreg. O4
½–1¼	Tonawanda,N.Y. B12
⅝–1¼	Marion,O. P11
⅝–1¼	Williamsport,Pa. S19
⅝–4	Gary,Ind. U5
⅞–3¾	Lackawanna,N.Y. B2
⅞–4½	SouthChicago,Ill. W14
15/16–2½	Pittsburgh J5
1–2	Ft. Worth,Tex. T4
1–2¼	Seattle B3
1–3½	Cleveland R2
1–5½	Duquesne,Pa. U5
1–6½	SouthChicago,Ill. R2
1⅛–4	Buffalo R2
1⅛–3½	Tacony,Philadelphia D4
1⅛–2¼	IndianaHarbor,Ind. I-2
1¼ only	Atlanta A11
1¼–3	Fontana,Calif. K1
1¼–under 4	Detroit R7
1½–4	Niles,Calif. P1
2–6	Warren,O. C17
2¼–4	Economy,Pa. B14

Half Rounds

7/16–¾	Atlanta A11
⅝–⅞	Alton,Ill. L1
⅞–3	Johnstown,Pa. B2
½–1½	Knoxville,Tenn. K6
¼–3	Youngstown U5
⅝–2	SanFrancisco B3

Ovals, Blunt

½ x ⅜ to 1¼ x 7/16	Alton,Ill. L1
½ x ¼	Atlanta A11
½ x ¼	Youngstown U5
⅝ x ⅜	Atlanta A11
⅝ x ⅜	Gary,Ind. U5
⅝ x ⅜	IndianaHarbor,Ind. I-2
⅝ x ⅜	SouthChicago,Ill. W14
⅝ x ⅜	Youngstown U5
¾ x ⅜	Gary,Ind. U5
¾ x ⅜	IndianaHarbor,Ind. I-2
¾ x ⅜	SouthChicago,Ill. W14
¾ x ⅜	Youngstown U5
⅞ x ⅜	SouthChicago,Ill. W14
⅞ x ⅜	SouthChicago,Ill. W14
⅞ x ⅜	SouthChicago,Ill. W14
⅞ x ⅜	Gary,Ind. U5
⅞ x ⅜	IndianaHarbor,Ind. I-2
⅞ x ⅜	SouthChicago,Ill. W14
7/8 x ⅜	Youngstown U5

SHARP OVALS

½ x ⅜ to 1¼ x 7/16	Alton,Ill. L1
⅝ x ⅜	Johnstown,Pa. B2
⅞ x ⅜	Johnstown,Pa. B2

HOT-ROLLED BAR SIZE SHAPES (Carbon Steel)

(Code number following mill point indicates producing company, key on page 38)

Angles, Equal Leg (fillet)

Sizes Produced (inches)	Mill Point, Producer
1/4 x 1/2 x 1/4	Atlanta A11
1/4 x 1/2 x 1/8	Knoxville,Tenn. K6
1/4 x 1/2 x 1/8	Youngstown U5
1/4 x 1/2 x 1/8 to 2 1/2 x 2 1/2 x . .	LosAngeles B3
1/4 x 1/2 x . . to 2 1/2 x 2 1/2 x . .	SanFrancisco B3
1/4 x 3/4 x 1/8	Youngstown U5
1/4 x 3/4 x 1/8	Gary,Ind. U5
1/4 x 3/4 x 1/8	Youngstown U5
1/4 x 3/4 x 3/16	Minnequa,Colo. C10
1/4 x 3/4 x 64	IndianaHarbor,Ind. I-2
1/4 x 3/4 x 11 ga.	Tonawanda,N.Y. B12
1/4 x 1 x 1/4	Atlanta A11
1/4 x 1 x 1/4	IndianaHarbor,Ind. I-2
1/4 x 1 x 1/8	Knoxville,Tenn. K6
1/4 x 1 x 1/8	Milton,Pa. B6
1/4 x 1 x 1/8	Minnequa,Colo. C10
1/4 x 1 x 1/8	Seattle N14
1/4 x 1 x 1/8	Tonawanda,N.Y. B12
1/4 x 1 x 1/8	Torrance,Calif. C11
1/4 x 1 x 3/16 to 3 x 3 x 7/8	Alton,Ill. L1
1/4 x 1 x 3/16 to 3 x 3 x 7/8	Madison,Ill. L1
1/4 x 1 x 3/16 to 3x3x5/8	KansasCity,Mo. S5
1/4 x 1 x 1/4 to 6x6x1	Houston S5
1/4 x 1 x 7/16	IndianaHarbor,Ind. I-2
1/4 x 1 x 7/16	Milton,Pa. B6
1/4 x 1 x 7/16	Minnequa,Colo. C10
1/4 x 1 x . . to 2 1/2 x 2 1/2 x . .	Seattle B3
1/4 x 1 1/4 x 3/32	Minnequa,Colo. C10
1/4 x 1 1/4 x 64	IndianaHarbor,Ind. I-2
1/4 x 1 1/4 x 11 ga.	Tonawanda,N.Y. B12
1/4 x 1 1/4 x 1/4	Atlanta A11
1/4 x 1 1/4 x 1/4	Gary,Ind. U5
1/4 x 1 1/4 x 1/4	IndianaHarbor,Ind. I-2
1/4 x 1 1/4 x 1/4	Knoxville,Tenn. K6
1/4 x 1 1/4 x 1/4	Minnequa,Colo. C10
1/4 x 1 1/4 x 1/4	Tonawanda,N.Y. B12
1/4 x 1 1/4 x 1/4	Youngstown U5
1/4 x 1 1/4 x 1/4	IndianaHarbor,Ind. I-2
1/4 x 1 1/4 x 1/4	Minnequa,Colo. C10
1x1x12 ga.	Tonawanda,N.Y. B12
1x1x 7/64	Atlanta A11
1x1x 7/64	IndianaHarbor,Ind. I-2
1x1x11 ga.	Tonawanda,N.Y. B12
1x1x1/8	Atlanta A11
1x1x1/8	Gary,Ind. U5
1x1x1/8	IndianaHarbor,Ind. I-2
1x1x1/8	Knoxville,Tenn. K6
1x1x1/8	Milton,Pa. B6
1x1x1/8	Minnequa,Colo. C10
1x1x1/8	Portland,Oreg. O4
1x1x1/8	Seattle N14
1x1x1/8	Tonawanda,N.Y. B12
1x1x1/8	Torrance,Calif. C11
1x1x1/8	Youngstown U5
1x1x1/8 to 1x1x 7/16	Alton,Ill. L1
1x1x1/8 to 1x1x 7/16	Madison,Ill. L1
1x1x1/8 to 3x3x1/4	Marion,O. P11
1x1x 3/16	Tonawanda,N.Y. B12
1x1x 3/16	Atlanta A11
1x1x 3/16	Gary,Ind. U5
1x1x 3/16	IndianaHarbor,Ind. I-2
1x1x 3/16	Knoxville,Tenn. K6
1x1x 3/16	Milton,Pa. B6
1x1x 3/16	Minnequa,Colo. C10
1x1x 3/16	Portland,Oreg. O4
1x1x 3/16	Seattle N14
1x1x 3/16	Tonawanda,N.Y. B12
1x1x 3/16	Torrance,Calif. C11
1x1x 3/16	Youngstown U5
1x1x 1/4	Atlanta A11
1x1x 1/4	Gary,Ind. U5
1x1x 1/4	IndianaHarbor,Ind. I-2
1x1x 1/4	Knoxville,Tenn. K6
1x1x 1/4	Minnequa,Colo. C10
1x1x 1/4	Portland,Oreg. O4
1x1x 1/4	Seattle N14
1x1x 1/4	Torrance,Calif. C11
1x1x 1/4	Youngstown U5
1x1x . . to 2 1/2 x 2 1/2 x . .	Bethlehem,Pa. B2
1 1/4 x 1 1/4 x 11 ga.	Tonwda.,N.Y. B12
1 1/4 x 1 1/4 x 1/8	Ind.Harbor,Ind. I-2
1 1/4 x 1 1/4 x 1/8	Tonawanda,N.Y. B12
1 1/4 x 1 1/4 x 1/8	Youngstown U5
1 1/4 x 1 1/4 x 3/16	Tonawanda,N.Y. B12
1 1/4 x 1 1/4 x 3/16	Ind.Harbor,Ind. I-2
1 1/4 x 1 1/4 x 7/16	Tonawanda,N.Y. B12
1 1/4 x 1 1/4 x 1/4	Ind.Harbor,Ind. I-2
1 1/4 x 1 1/4 x 64	Atlanta A11
1 1/4 x 1 1/4 x 11 ga.	Tonawda.,N.Y. B12
1 1/4 x 1 1/4 x 1/4	AlabamaCity,Ala. R2
1 1/4 x 1 1/4 x 1/4	Atlanta A11

Sizes Produced (inches)	Mill Point, Producer
1 1/4 x 1 1/4 x 1/4	Gary,Ind. U5
1 1/4 x 1 1/4 x 1/4	Ind.Harbor,Ind. I-2
1 1/4 x 1 1/4 x 1/4	Knoxville,Tenn. K6
1 1/4 x 1 1/4 x 1/4	Milton,Pa. B6
1 1/4 x 1 1/4 x 1/4	Minnequa,Colo. C10
1 1/4 x 1 1/4 x 1/4	Portland,Oreg. O4
1 1/4 x 1 1/4 x 1/4	Seattle N14
1 1/4 x 1 1/4 x 1/4	Tonawanda,N.Y. B12
1 1/4 x 1 1/4 x 1/4	Torrance,Calif. C11
1 1/4 x 1 1/4 x 1/4	Youngstown U5
1 1/4 x 1 1/4 x 5/16 to 1 1/4 x 1 1/4 x 1/2	Alton,Ill. L1
1 1/4 x 1 1/4 x 5/16 to 1 1/4 x 1 1/4 x 1/2	Madison,Ill. L1
1 1/4 x 1 1/4 x 3/8	Tonawanda,N.Y. B12
1 1/4 x 1 1/4 x 3/8	AlabamaCity,Ala. R2
1 1/4 x 1 1/4 x 3/8	Atlanta A11
1 1/4 x 1 1/4 x 3/8	Gary,Ind. U5
1 1/4 x 1 1/4 x 3/8	Ind.Harbor,Ind. I-2
1 1/4 x 1 1/4 x 3/8	Knoxville,Tenn. K6
1 1/4 x 1 1/4 x 3/8	Milton,Pa. B6
1 1/4 x 1 1/4 x 3/8	Minnequa,Colo. C10
1 1/4 x 1 1/4 x 3/8	Portland,Oreg. O4
1 1/4 x 1 1/4 x 3/8	Seattle N11
1 1/4 x 1 1/4 x 3/8	Tonawanda,N.Y. B12
1 1/4 x 1 1/4 x 3/8	Torrance,Calif. C11
1 1/4 x 1 1/4 x 3/8	Youngstown U5
1 1/4 x 1 1/4 x 7/16	AlabamaCity,Ala. R2
1 1/4 x 1 1/4 x 7/16	Atlanta A11
1 1/4 x 1 1/4 x 7/16	Gary,Ind. U5
1 1/4 x 1 1/4 x 7/16	Ind.Harbor,Ind. I-2
1 1/4 x 1 1/4 x 7/16	Knoxville,Tenn. K6
1 1/4 x 1 1/4 x 7/16	Milton,Pa. B6
1 1/4 x 1 1/4 x 7/16	Minnequa,Colo. C10
1 1/4 x 1 1/4 x 7/16	Portland,Oreg. O4
1 1/4 x 1 1/4 x 7/16	Seattle N14
1 1/4 x 1 1/4 x 7/16	Tonawanda,N.Y. B12
1 1/4 x 1 1/4 x 7/16	Torrance,Calif. C11
1 1/4 x 1 1/4 x 7/16	Youngstown U5
1 1/4 x 1 1/4 x 1/2	Alton,Ill. L1
1 1/4 x 1 1/4 x 1/2	Madison,Ill. L1
1 1/4 x 1 1/4 x 1/2 to 2 1/2 x 2 1/2 x 5/16	Niles,Calif. P1
1 1/2 x 1 1/2 x 3/32	Tonawanda,N.Y. B12
1 1/2 x 1 1/2 x 1/8	AlabamaCity,Ala. R2
1 1/2 x 1 1/2 x 1/8	Aliquippa,Pa. J5
1 1/2 x 1 1/2 x 1/8	Atlanta A11
1 1/2 x 1 1/2 x 1/8	Gary,Ind. U5
1 1/2 x 1 1/2 x 1/8	Ind.Harbor,Ind. I-2
1 1/2 x 1 1/2 x 1/8	Knoxville,Tenn. K6
1 1/2 x 1 1/2 x 1/8	Milton,Pa. B6
1 1/2 x 1 1/2 x 1/8	Minnequa,Colo. C10
1 1/2 x 1 1/2 x 1/8	Pittsburg,Calif. C11
1 1/2 x 1 1/2 x 1/8	Portland,Oreg. O4
1 1/2 x 1 1/2 x 1/8	Seattle N14
1 1/2 x 1 1/2 x 1/8	Tonawanda,N.Y. B12
1 1/2 x 1 1/2 x 1/8	Torrance,Calif. C11
1 1/2 x 1 1/2 x 1/8	Youngstown U5
1 1/2 x 1 1/2 x 1/4	AlabamaCity,Ala. R2
1 1/2 x 1 1/2 x 1/4	Aliquippa,Pa. J5
1 1/2 x 1 1/2 x 1/4	Atlanta A11
1 1/2 x 1 1/2 x 1/4	Gary,Ind. U5
1 1/2 x 1 1/2 x 1/4	Ind.Harbor,Ind. I-2
1 1/2 x 1 1/2 x 1/4	Knoxville,Tenn. K6
1 1/2 x 1 1/2 x 1/4	Milton,Pa. B6
1 1/2 x 1 1/2 x 1/4	Minnequa,Colo. C10
1 1/2 x 1 1/2 x 1/4	Pittsburg,Calif. C11
1 1/2 x 1 1/2 x 1/4	Portland,Oreg. O4
1 1/2 x 1 1/2 x 1/4	Seattle N14
1 1/2 x 1 1/2 x 1/4	Tonawanda,N.Y. B12
1 1/2 x 1 1/2 x 1/4	Torrance,Calif. C11
1 1/2 x 1 1/2 x 1/4	Youngstown U5
1 1/2 x 1 1/2 x 5/16	AlabamaCity,Ala. R2
1 1/2 x 1 1/2 x 5/16	Aliquippa,Pa. J5
1 1/2 x 1 1/2 x 5/16	Atlanta A11
1 1/2 x 1 1/2 x 5/16	Gary,Ind. U5
1 1/2 x 1 1/2 x 5/16	Ind.Harbor,Ind. I-2
1 1/2 x 1 1/2 x 5/16	Knoxville,Tenn. K6
1 1/2 x 1 1/2 x 5/16	Milton,Pa. B6
1 1/2 x 1 1/2 x 5/16	Minnequa,Colo. C10
1 1/2 x 1 1/2 x 5/16	Pittsburg,Calif. C11
1 1/2 x 1 1/2 x 5/16	Portland,Oreg. O4
1 1/2 x 1 1/2 x 5/16	Seattle N14
1 1/2 x 1 1/2 x 5/16	Tonawanda,N.Y. B12
1 1/2 x 1 1/2 x 5/16	Torrance,Calif. C11
1 1/2 x 1 1/2 x 5/16	Youngstown U5
1 1/2 x 1 1/2 x 11 ga.	Tonwnda.,N.Y. B12

Sizes Produced (inches)	Mill Point, Producer
1 3/4 x 1 3/4 x 1/4	AlabamaCity,Ala. R2
1 3/4 x 1 3/4 x 1/4	Aliquippa,Pa. J5
1 3/4 x 1 3/4 x 1/4	Atlanta A11
1 3/4 x 1 3/4 x 1/4	Gary,Ind. U5
1 3/4 x 1 3/4 x 1/4	Ind.Harbor,Ind. I-2
1 3/4 x 1 3/4 x 1/4	Knoxville,Tenn. K6
1 3/4 x 1 3/4 x 1/4	Minnequa,Colo. C10
1 3/4 x 1 3/4 x 1/4	Tonawanda,N.Y. B12
1 3/4 x 1 3/4 x 1/4	Torrance,Calif. C11
1 3/4 x 1 3/4 x 1/4	Youngstown U5
1 3/4 x 1 3/4 x 5/16	Tonawanda,N.Y. B12
1 3/4 x 1 3/4 x 5/16	AlabamaCity,Ala. R2
1 3/4 x 1 3/4 x 5/16	Aliquippa,Pa. J5
1 3/4 x 1 3/4 x 5/16	Atlanta A11
1 3/4 x 1 3/4 x 5/16	Gary,Ind. U5
1 3/4 x 1 3/4 x 5/16	Ind.Harbor,Ind. I-2
1 3/4 x 1 3/4 x 5/16	Knoxville,Tenn. K6
1 3/4 x 1 3/4 x 5/16	Minnequa,Colo. C10
1 3/4 x 1 3/4 x 5/16	Tonawanda,N.Y. B12
1 3/4 x 1 3/4 x 5/16	Torrance,Calif. C11
1 3/4 x 1 3/4 x 5/16	Youngstown U5
1 3/4 x 1 3/4 x 3/8	AlabamaCity,Ala. R2
1 3/4 x 1 3/4 x 3/8	Aliquippa,Pa. J5
1 3/4 x 1 3/4 x 3/8	Atlanta A11
1 3/4 x 1 3/4 x 3/8	Gary,Ind. U5
1 3/4 x 1 3/4 x 3/8	Ind.Harbor,Ind. I-2
1 3/4 x 1 3/4 x 3/8	Knoxville,Tenn. K6
1 3/4 x 1 3/4 x 3/8	Minnequa,Colo. C10
1 3/4 x 1 3/4 x 3/8	Tonawanda,N.Y. B12
1 3/4 x 1 3/4 x 3/8	Torrance,Calif. C11
1 3/4 x 1 3/4 x 3/8	Youngstown U5
1 3/4 x 1 3/4 x 7/16	AlabamaCity,Ala. R2
1 3/4 x 1 3/4 x 7/16	Aliquippa,Pa. J5
1 3/4 x 1 3/4 x 7/16	Atlanta A11
1 3/4 x 1 3/4 x 7/16	Gary,Ind. U5
1 3/4 x 1 3/4 x 7/16	Ind.Harbor,Ind. I-2
1 3/4 x 1 3/4 x 7/16	Knoxville,Tenn. K6
1 3/4 x 1 3/4 x 7/16	Minnequa,Colo. C10
1 3/4 x 1 3/4 x 7/16	Tonawanda,N.Y. B12
1 3/4 x 1 3/4 x 7/16	Torrance,Calif. C11
1 3/4 x 1 3/4 x 7/16	Youngstown U5
1 3/4 x 1 3/4 x 1/2	AlabamaCity,Ala. R2
1 3/4 x 1 3/4 x 1/2	Aliquippa,Pa. J5
1 3/4 x 1 3/4 x 1/2	Atlanta A11
1 3/4 x 1 3/4 x 1/2	Gary,Ind. U5
1 3/4 x 1 3/4 x 1/2	Ind.Harbor,Ind. I-2
1 3/4 x 1 3/4 x 1/2	Knoxville,Tenn. K6
1 3/4 x 1 3/4 x 1/2	Minnequa,Colo. C10
1 3/4 x 1 3/4 x 1/2	Tonawanda,N.Y. B12
1 3/4 x 1 3/4 x 1/2	Torrance,Calif. C11
1 3/4 x 1 3/4 x 1/2	Youngstown U5
1 3/4 x 1 3/4 x 5/8	AlabamaCity,Ala. R2
1 3/4 x 1 3/4 x 5/8	Ind.Harbor,Ind. I-2
1 3/4 x 1 3/4 x 5/8	Knoxville,Tenn. K6
1 3/4 x 1 3/4 x 5/8	Minnequa,Colo. C10
1 3/4 x 1 3/4 x 5/8	Tonawanda,N.Y. B12
2x2x11 ga.	Tonawanda,N.Y. B12
2x2x 1/8	Aliquippa,Pa. J5
2x2x 1/8	Atlanta A11
2x2x 1/8	Gary,Ind. U5
2x2x 1/8	IndianaHarbor,Ind. I-2
2x2x 1/8	Knoxville,Tenn. K6
2x2x 1/8	Minnequa,Colo. C10
2x2x 1/8	Pittsburg,Calif. C11
2x2x 1/8	Portland,Oreg. O4
2x2x 1/8	Seattle N14
2x2x 1/8	Tonawanda,N.Y. B12
2x2x 1/8	Torrance,Calif. C11
2x2x 1/8	Youngstown U5
2x2x 3/32 to 2x2x 1/4	Tonawanda,N.Y. B12
2x2x 3/32 to 2x2x 1/4	Alton,Ill. L1
2x2x 3/32 to 2x2x 1/4	Madison,Ill. L1
2x2x 3/16	AlabamaCity,Ala. R2
2x2x 3/16	Aliquippa,Pa. J5
2x2x 3/16	Atlanta A11
2x2x 3/16	Clairton,Pa. U5
2x2x 3/16	Fontana,Calif. K1
2x2x 3/16	Gary,Ind. U5
2x2x 3/16	IndianaHarbor,Ind. I-2
2x2x 3/16	Knoxville,Tenn. K6
2x2x 3/16	Minnequa,Colo. C10
2x2x 3/16	Pittsburg,Calif. C11
2x2x 3/16	Portland,Oreg. O4
2x2x 3/16	Seattle N14
2x2x 3/16	Tonawanda,N.Y. B12
2x2x 3/16	Torrance,Calif. C11
2x2x 3/16	Youngstown U5
2x2x 7/32	AlabamaCity,Ala. R2
2x2x 7/32	Aliquippa,Pa. J5
2x2x 7/32	Atlanta A11
2x2x 7/32	Clairton,Pa. U5
2x2x 7/32	Fontana,Calif. K1
2x2x 7/32	Gary,Ind. U5
2x2x 7/32	IndianaHarbor,Ind. I-2
2x2x 7/32	Knoxville,Tenn. K6
2x2x 7/32	Minnequa,Colo. C10
2x2x 7/32	Pittsburg,Calif. C11
2x2x 7/32	Portland,Oreg. O4
2x2x 7/32	Seattle N14
2x2x 7/32	Tonawanda,N.Y. B12
2x2x 7/32	Torrance,Calif. C11
2x2x 7/32	Youngstown U5
2x2x 1/4	AlabamaCity,Ala. R2
2x2x 1/4	Aliquippa,Pa. J5
2x2x 1/4	Atlanta A11
2x2x 1/4	Clairton,Pa. U5
2x2x 1/4	Fontana,Calif. K1
2x2x 1/4	Gary,Ind. U5
2x2x 1/4	IndianaHarbor,Ind. I-2
2x2x 1/4	Knoxville,Tenn. K6
2x2x 1/4	Minnequa,Colo. C10
2x2x 1/4	Pittsburg,Calif. C11
2x2x 1/4	Portland,Oreg. O4
2x2x 1/4	Seattle N14
2x2x 1/4	Tonawanda,N.Y. B12
2x2x 1/4	Torrance,Calif. C11
2x2x 1/4	AlabamaCity,Ala. R2
2x2x 1/4	Aliquippa,Pa. J5
2x2x 1/4	Atlanta A11
2x2x 1/4	Clairton,Pa. U5
2x2x 1/4	Fontana,Calif. K1

Sizes Produced (inches)	Mill Point, Producer
2x2x 1/4	Gary,Ind. U5
2x2x 1/4	IndianaHarbor,Ind. I-2
2x2x 1/4	Knoxville,Tenn. K6
2x2x 1/4	Minnequa,Colo. C10
2x2x 1/4	Portland,Oreg. O4
2x2x 1/4	Seattle N14
2x2x 1/4	Tonawanda,N.Y. B12
2x2x 1/4	Torrance,Calif. C11
2x2x 5/16	IndianaHarbor,Ind. I-2
2x2x 5/16	Minnequa,Colo. C10
2x2x 1/2	AlabamaCity,Ala. R2
2x2x 1/2	Minnequa,Colo. C10
2x2x . . to 2 1/2 x 2 1/2 x . .	Lackawanna,N.Y. B2
2 1/4 x 2 1/4 x 1/4	Knoxville,Tenn. K6
2 1/4 x 2 1/4 x 1/4	Minnequa,Colo. C10
2 1/4 x 2 1/4 x 5/16	Knoxville,Tenn. K6
2 1/4 x 2 1/4 x 5/16	Minnequa,Colo. C10
2 1/4 x 2 1/4 x 3/8	Knoxville,Tenn. K6
2 1/4 x 2 1/4 x 3/8	Minnequa,Colo. C10
2 1/4 x 2 1/4 x 7/16	Knoxville,Tenn. K6
2 1/4 x 2 1/4 x 7/16	Minnequa,Colo. C10
2 1/4 x 2 1/4 x 1/2	Knoxville,Tenn. K6
2 1/4 x 2 1/4 x 1/2	Minnequa,Colo. C10
2 1/2 x 2 1/2 x 1/4	Knoxville,Tenn. K6
2 1/2 x 2 1/2 x 1/4	Minnequa,Colo. C10
2 1/2 x 2 1/2 x 1/4	Tonawanda,N.Y. B12
2 1/2 x 2 1/2 x 5/16	AlabamaCity,Ala. R2
2 1/2 x 2 1/2 x 5/16	Aliquippa,Pa. J5
2 1/2 x 2 1/2 x 5/16	Clairton,Pa. U5
2 1/2 x 2 1/2 x 5/16	Fontana,Calif. K1
2 1/2 x 2 1/2 x 5/16	Gary,Ind. U5
2 1/2 x 2 1/2 x 5/16	Ind.Harbor,Ind. I-2
2 1/2 x 2 1/2 x 5/16	Knoxville,Tenn. K6
2 1/2 x 2 1/2 x 5/16	Minnequa,Colo. C10
2 1/2 x 2 1/2 x 5/16	Portland,Oreg. O4
2 1/2 x 2 1/2 x 5/16	Seattle N14
2 1/2 x 2 1/2 x 5/16	Tonawanda,N.Y. B12
2 1/2 x 2 1/2 x 5/16	Torrance,Calif. C11
2 1/2 x 2 1/2 x 3/8	AlabamaCity,Ala. R2
2 1/2 x 2 1/2 x 3/8	Aliquippa,Pa. J5
2 1/2 x 2 1/2 x 3/8	Clairton,Pa. U5
2 1/2 x 2 1/2 x 3/8	Fontana,Calif. K1
2 1/2 x 2 1/2 x 3/8	Gary,Ind. U5
2 1/2 x 2 1/2 x 3/8	Ind.Harbor,Ind. I-2
2 1/2 x 2 1/2 x 3/8	Knoxville,Tenn. K6
2 1/2 x 2 1/2 x 3/8	Minnequa,Colo. C10
2 1/2 x 2 1/2 x 3/8	Portland,Oreg. O4
2 1/2 x 2 1/2 x 3/8	Seattle N14
2 1/2 x 2 1/2 x 3/8	Tonawanda,N.Y. B12
2 1/2 x 2 1/2 x 3/8	Torrance,Calif. C11
2 1/2 x 2 1/2 x 7/16	AlabamaCity,Ala. R2
2 1/2 x 2 1/2 x 7/16	Aliquippa,Pa. J5
2 1/2 x 2 1/2 x 7/16	Clairton,Pa. U5
2 1/2 x 2 1/2 x 7/16	Fontana,Calif. K1
2 1/2 x 2 1/2 x 7/16	Gary,Ind. U5
2 1/2 x 2 1/2 x 7/16	Ind.Harbor,Ind. I-2
2 1/2 x 2 1/2 x 7/16	Knoxville,Tenn. K6
2 1/2 x 2 1/2 x 7/16	Minnequa,Colo. C10
2 1/2 x 2 1/2 x 7/16	Portland,Oreg. O4
2 1/2 x 2 1/2 x 7/16	Seattle N14
2 1/2 x 2 1/2 x 7/16	Tonawanda,N.Y. B12
2 1/2 x 2 1/2 x 7/16	Torrance,Calif. C11
2 1/2 x 2 1/2 x 1/2	AlabamaCity,Ala. R2
2 1/2 x 2 1/2 x 1/2	Aliquippa,Pa. J5
2 1/2 x 2 1/2 x 1/2	Clairton,Pa. U5
2 1/2 x 2 1/2 x 1/2	Fontana,Calif. K1
2 1/2 x 2 1/2 x 1/2	Gary,Ind. U5
2 1/2 x 2 1/2 x 1/2	Ind.Harbor,Ind. I-2
2 1/2 x 2 1/2 x 1/2	Knoxville,Tenn. K6
2 1/2 x 2 1/2 x 1/2	Minnequa,Colo. C10
2 1/2 x 2 1/2 x 1/2	Portland,Oreg. O4
2 1/2 x 2 1/2 x 1/2	Seattle N14
3x3x 1/4	Knoxville,Tenn. K6
3x3x 1/4	Knoxville,Tenn. K6
3x3x 1/4	Portland,Oreg. O4
3x3x 1/4	Knoxville,Tenn. K6
3x3x 1/4	Portland,Oreg. O4
3x3x 5/16	Knoxville,Tenn. K6
3x3x 5/16	Portland,Oreg. O4
3x3x 3/8	Knoxville,Tenn. K6
3x3x 3/8	Portland,Oreg. O4
3x3x 7/16	Knoxville,Tenn. K6
3x3x 7/16	Portland,Oreg. O4
3x3x 1/2	Knoxville,Tenn. K6
3x3x 1/2	Portland,Oreg. O4

HOT-ROLLED BAR SIZE SHAPES (Carbon Steel)

(Code number following mill point indicates producing company, key on page 38)

Angles, Equal Leg (sq. rt.)

Sizes Produced (inches)	Mill Point, Producer
3/4 x 3/4 x 11 ga.	Tonawanda,N.Y. B12
3/4 x 3/4 x 1/8	Atlanta A11
3/4 x 3/4 x 1/4	Tonawanda,N.Y. B12
3/4 x 3/4 x 11 ga.	Tonawanda,N.Y. B12
3/4 x 3/4 x 3/16	Atlanta A11
1 x 1 x 3/16	Tonawanda,N.Y. B12
1 x 1 x 12 ga.	Tonawanda,N.Y. B12
1 x 1 x 11 ga.	Tonawanda,N.Y. B12
1 x 1 x 1/8	Atlanta A11
1 x 1 x 5/16	Tonawanda,N.Y. B12
1 x 1 x 1/4	Tonawanda,N.Y. B12
1 x 1 x 3/8	Tonawanda,N.Y. B12
1 1/8 x 1 1/8 x 11 ga.	Tnwnda.,N.Y. B12
1 1/8 x 1 1/8 x 3/16	Tnwnda.,N.Y. B12
1 1/8 x 1 1/8 x 1/4	Tnwnda.,N.Y. B12
1 1/8 x 1 1/8 x 5/16	Knoxville,Tenn. K6
1 1/4 x 1 1/4 x 11 ga.	Tnwnda.,N.Y. B12
1 1/4 x 1 1/4 x 1/8	Atlanta A11
1 1/4 x 1 1/4 x 3/16	Knoxville,Tenn. K6
1 1/4 x 1 1/4 x 1/4	Tnwnda.,N.Y. B12
1 1/4 x 1 1/4 x 5/16	Knoxville,Tenn. K6
1 1/4 x 1 1/4 x 3/8	Tnwnda.,N.Y. B12
1 1/4 x 1 1/4 x 7/16	Atlanta A11
1 1/4 x 1 1/4 x 1/2	Knoxville,Tenn. K6
1 1/4 x 1 1/4 x 5/8	Tnwnda.,N.Y. B12
1 1/4 x 1 1/4 x 3/4	Tnwnda.,N.Y. B12
1 1/4 x 1 1/4 x 7/8	Tnwnda.,N.Y. B12
1 1/4 x 1 1/4 x 1	Tnwnda.,N.Y. B12
1 1/2 x 1 1/2 x 3/16	Knoxville,Tenn. K6
1 1/2 x 1 1/2 x 11 ga.	Tnwnda.,N.Y. B12
1 1/2 x 1 1/2 x 1/8	Atlanta A11
1 1/2 x 1 1/2 x 1/4	Tnwnda.,N.Y. B12
1 1/2 x 1 1/2 x 5/16	Tnwnda.,N.Y. B12
1 1/2 x 1 1/2 x 3/8	Tnwnda.,N.Y. B12
1 1/2 x 1 1/2 x 7/16	Tnwnda.,N.Y. B12
1 1/2 x 1 1/2 x 1/2	Tnwnda.,N.Y. B12
1 1/2 x 1 1/2 x 5/8	Tnwnda.,N.Y. B12
1 1/2 x 1 1/2 x 3/4	Tnwnda.,N.Y. B12
1 1/2 x 1 1/2 x 7/8	Tnwnda.,N.Y. B12
1 1/2 x 1 1/2 x 1	Tnwnda.,N.Y. B12
1 3/4 x 1 3/4 x 1/4	Tnwnda.,N.Y. B12
1 3/4 x 1 3/4 x 5/16	Tnwnda.,N.Y. B12
1 3/4 x 1 3/4 x 3/8	Tnwnda.,N.Y. B12
1 3/4 x 1 3/4 x 7/16	Tnwnda.,N.Y. B12
1 3/4 x 1 3/4 x 1/2	Tnwnda.,N.Y. B12
1 3/4 x 1 3/4 x 5/8	Tnwnda.,N.Y. B12
1 3/4 x 1 3/4 x 3/4	Tnwnda.,N.Y. B12
1 3/4 x 1 3/4 x 7/8	Tnwnda.,N.Y. B12
1 3/4 x 1 3/4 x 1	Tnwnda.,N.Y. B12
2 x 2 x 1/4	Tnwnda.,N.Y. B12
2 x 2 x 5/16	Tnwnda.,N.Y. B12
2 x 2 x 3/8	Tnwnda.,N.Y. B12
2 x 2 x 7/16	Tnwnda.,N.Y. B12
2 x 2 x 1/2	Tnwnda.,N.Y. B12
2 x 2 x 5/8	Tnwnda.,N.Y. B12
2 x 2 x 3/4	Tnwnda.,N.Y. B12
2 x 2 x 7/8	Tnwnda.,N.Y. B12
2 x 2 x 1	Tnwnda.,N.Y. B12
2 1/2 x 2 1/2 x 3/16	Tnwnda.,N.Y. B12
2 1/2 x 2 1/2 x 1/4	Tnwnda.,N.Y. B12
2 1/2 x 2 1/2 x 5/16	Tnwnda.,N.Y. B12
2 1/2 x 2 1/2 x 3/8	Tnwnda.,N.Y. B12
2 1/2 x 2 1/2 x 7/16	Tnwnda.,N.Y. B12
2 1/2 x 2 1/2 x 1/2	Tnwnda.,N.Y. B12
2 1/2 x 2 1/2 x 5/8	Tnwnda.,N.Y. B12
2 1/2 x 2 1/2 x 3/4	Tnwnda.,N.Y. B12
2 1/2 x 2 1/2 x 7/8	Tnwnda.,N.Y. B12
2 1/2 x 2 1/2 x 1	Tnwnda.,N.Y. B12
2 1/2 x 2 1/2 x 1 1/4	Tnwnda.,N.Y. B12
2 1/2 x 2 1/2 x 1 1/2	Tnwnda.,N.Y. B12
2 1/2 x 2 1/2 x 1 3/4	Tnwnda.,N.Y. B12
2 1/2 x 2 1/2 x 2	Tnwnda.,N.Y. B12
3 x 3 x 1/4	Knoxville,Tenn. K6
3 x 3 x 5/16	Knoxville,Tenn. K6
3 x 3 x 3/8	Knoxville,Tenn. K6
3 x 3 x 7/16	Knoxville,Tenn. K6
3 x 3 x 1/2	Knoxville,Tenn. K6
3 x 3 x 5/8	Knoxville,Tenn. K6
3 x 3 x 3/4	Knoxville,Tenn. K6
3 x 3 x 7/8	Knoxville,Tenn. K6
3 x 3 x 1	Knoxville,Tenn. K6
3 x 3 x 1 1/4	Knoxville,Tenn. K6
3 x 3 x 1 1/2	Knoxville,Tenn. K6
3 x 3 x 1 3/4	Knoxville,Tenn. K6
3 x 3 x 2	Knoxville,Tenn. K6
3 x 3 x 2 1/2	Knoxville,Tenn. K6
3 x 3 x 3	Knoxville,Tenn. K6
3 1/2 x 3 1/2 x 1/4	Knoxville,Tenn. K6
3 1/2 x 3 1/2 x 5/16	Knoxville,Tenn. K6
3 1/2 x 3 1/2 x 3/8	Knoxville,Tenn. K6
3 1/2 x 3 1/2 x 7/16	Knoxville,Tenn. K6
3 1/2 x 3 1/2 x 1/2	Knoxville,Tenn. K6
3 1/2 x 3 1/2 x 5/8	Knoxville,Tenn. K6
3 1/2 x 3 1/2 x 3/4	Knoxville,Tenn. K6
3 1/2 x 3 1/2 x 7/8	Knoxville,Tenn. K6
3 1/2 x 3 1/2 x 1	Knoxville,Tenn. K6
3 1/2 x 3 1/2 x 1 1/4	Knoxville,Tenn. K6
3 1/2 x 3 1/2 x 1 1/2	Knoxville,Tenn. K6
3 1/2 x 3 1/2 x 1 3/4	Knoxville,Tenn. K6
3 1/2 x 3 1/2 x 2	Knoxville,Tenn. K6
3 1/2 x 3 1/2 x 2 1/2	Knoxville,Tenn. K6
3 1/2 x 3 1/2 x 3	Knoxville,Tenn. K6
4 x 4 x 1/4	Knoxville,Tenn. K6
4 x 4 x 5/16	Knoxville,Tenn. K6
4 x 4 x 3/8	Knoxville,Tenn. K6
4 x 4 x 7/16	Knoxville,Tenn. K6
4 x 4 x 1/2	Knoxville,Tenn. K6
4 x 4 x 5/8	Knoxville,Tenn. K6
4 x 4 x 3/4	Knoxville,Tenn. K6
4 x 4 x 7/8	Knoxville,Tenn. K6
4 x 4 x 1	Knoxville,Tenn. K6
4 x 4 x 1 1/4	Knoxville,Tenn. K6
4 x 4 x 1 1/2	Knoxville,Tenn. K6
4 x 4 x 1 3/4	Knoxville,Tenn. K6
4 x 4 x 2	Knoxville,Tenn. K6
4 x 4 x 2 1/2	Knoxville,Tenn. K6
4 x 4 x 3	Knoxville,Tenn. K6
4 x 4 x 3 1/2	Knoxville,Tenn. K6
4 x 4 x 4	Knoxville,Tenn. K6
5 x 5 x 3/8	Knoxville,Tenn. K6
5 x 5 x 7/16	Knoxville,Tenn. K6
5 x 5 x 1/2	Knoxville,Tenn. K6
5 x 5 x 5/8	Knoxville,Tenn. K6
5 x 5 x 3/4	Knoxville,Tenn. K6
5 x 5 x 7/8	Knoxville,Tenn. K6
5 x 5 x 1	Knoxville,Tenn. K6
5 x 5 x 1 1/4	Knoxville,Tenn. K6
5 x 5 x 1 1/2	Knoxville,Tenn. K6
5 x 5 x 1 3/4	Knoxville,Tenn. K6
5 x 5 x 2	Knoxville,Tenn. K6
5 x 5 x 2 1/2	Knoxville,Tenn. K6
5 x 5 x 3	Knoxville,Tenn. K6
5 x 5 x 3 1/2	Knoxville,Tenn. K6
5 x 5 x 4	Knoxville,Tenn. K6
5 x 5 x 4 1/2	Knoxville,Tenn. K6
5 x 5 x 5	Knoxville,Tenn. K6
6 x 6 x 1/2	Knoxville,Tenn. K6
6 x 6 x 5/8	Knoxville,Tenn. K6
6 x 6 x 3/4	Knoxville,Tenn. K6
6 x 6 x 7/8	Knoxville,Tenn. K6
6 x 6 x 1	Knoxville,Tenn. K6
6 x 6 x 1 1/4	Knoxville,Tenn. K6
6 x 6 x 1 1/2	Knoxville,Tenn. K6
6 x 6 x 1 3/4	Knoxville,Tenn. K6
6 x 6 x 2	Knoxville,Tenn. K6
6 x 6 x 2 1/2	Knoxville,Tenn. K6
6 x 6 x 3	Knoxville,Tenn. K6
6 x 6 x 3 1/2	Knoxville,Tenn. K6
6 x 6 x 4	Knoxville,Tenn. K6
6 x 6 x 4 1/2	Knoxville,Tenn. K6
6 x 6 x 5	Knoxville,Tenn. K6
6 x 6 x 5 1/2	Knoxville,Tenn. K6
6 x 6 x 6	Knoxville,Tenn. K6

Angles, Unequal Leg (fillet)

Sizes Produced (inches)	Mill Point, Producer
3/4 x 3/8 x 11 ga.	Tnwnda.,N.Y. B12
3/4 x 3/8 x 1/8	Tnwnda.,N.Y. B12
1 x 3/4 x 7/64	Ind.Harbor,Ind. I-2
1 x 3/4 x 11 ga.	Tnwnda.,N.Y. B12
1 x 3/4 x 1/8	Atlanta A11
1 x 3/4 x 1/4	Gary,Ind. U5
1 x 3/4 x 1/4	Ind.Harbor,Ind. I-2
1 x 3/4 x 1/4	Tnwnda.,N.Y. B12
1 x 3/4 x 1/4	Youngstown U5
1 x 3/4 x 1/4 to 3x2x3/8	Marion,O. P11
1 x 3/4 x 5/16	Tnwnda.,N.Y. B12
1 x 3/4 x 3/8	Ind.Harbor,Ind. I-2
1 x 3/4 x 3/8	Tnwnda.,N.Y. B12
1 x 3/4 x 3/8	Youngstown U5
1 1/4 x 1 x 1/8	Atlanta A11
1 1/4 x 1 x 1/4	Youngstown U5
1 1/4 x 1 1/4 x 1/8	Ind.Harbor,Ind. I-2
1 1/4 x 1 1/4 x 1/8	Atlanta A11
1 1/4 x 1 1/4 x 1/8	Gary,Ind. U5
1 1/4 x 1 1/4 x 1/8	Ind.Harbor,Ind. I-2
1 1/4 x 1 1/4 x 1/8	Youngstown U5
1 1/4 x 1 1/4 x 3/16	Gary,Ind. U5
1 1/4 x 1 1/4 x 3/16	Ind.Harbor,Ind. I-2
1 1/4 x 1 1/4 x 3/16	Youngstown U5
1 1/4 x 1 1/4 x 7/64 to 2 1/2x2x3/8	SanFrancisco B3
1 3/8 x 1 x 11 ga.	Tnwnda.,N.Y. B12
1 3/8 x 1 x 1/8	Tnwnda.,N.Y. B12
1 3/8 x 1 x 3/16	Tnwnda.,N.Y. B12
1 3/8 x 1 1/4 x 11 ga.	Tnwnda.,N.Y. B12
1 3/8 x 1 3/8 x 1/4	Tnwnda.,N.Y. B12
1 3/8 x 1 3/8 x 5/16	Tnwnda.,N.Y. B12
1 3/8 x 1 3/8 x 1/4	Tnwnda.,N.Y. B12
1 1/2 x 3/4 x 1/8	Youngstown U5
1 1/2 x 1 x 1/8	Atlanta A11
1 1/2 x 1 x 1/8	Tnwnda.,N.Y. B12
1 1/2 x 1 x 3/16	Tnwnda.,N.Y. B12
1 1/2 x 1 x 1/4	Tnwnda.,N.Y. B12
1 1/2 x 1 x 5/16	Tnwnda.,N.Y. B12
1 1/2 x 1 1/4 x 11 ga.	Tnwnda.,N.Y. B12
1 1/2 x 1 1/4 x 1/8	Tnwnda.,N.Y. B12
1 1/2 x 1 1/4 x 3/16	Tnwnda.,N.Y. B12
1 1/2 x 1 1/4 x 1/4	Tnwnda.,N.Y. B12
1 1/2 x 1 1/4 x 5/16	Youngstown U5
1 1/2 x 1 1/4 x 1/4	Tnwnda.,N.Y. B12
1 3/4 x 1 x 11 ga.	Tnwnda.,N.Y. B12
1 3/4 x 1 x 1/8	Tnwnda.,N.Y. B12
1 3/4 x 1 x 3/64	Tnwnda.,N.Y. B12
1 3/4 x 1 1/4 x 11 ga.	Tnwnda.,N.Y. B12
1 3/4 x 1 1/4 x 1/4	Gary,Ind. U5
1 3/4 x 1 1/4 x 1/4	Tnwnda.,N.Y. B12
1 3/4 x 1 1/4 x 1/4	Youngstown U5
1 3/4 x 1 1/4 x 3/8	Tnwnda.,N.Y. B12
1 3/4 x 1 1/4 x 3/8	Gary,Ind. U5
1 3/4 x 1 1/4 x 3/8	Tnwnda.,N.Y. B12
1 3/4 x 1 1/4 x 3/8	Youngstown U5
1 3/4 x 1 1/4 x 1/2	Gary,Ind. U5
1 3/4 x 1 1/4 x 1/4	Tnwnda.,N.Y. B12
1 3/4 x 1 1/4 x 1/4	Youngstown U5
1 3/4 x 1 1/4 x .. to 2 1/2x2x..	Bethlehem,Pa. B2
1 3/4 x 1 1/4 x .. to 2 1/2x2x..	LosAngeles B3
1 3/4 x 1 1/2 x .. to 2 1/2x2x..	Seattle B3
1 3/4 x 1 1/2 x 11 ga.	Tnwnda.,N.Y. B12
1 3/4 x 1 1/2 x 1/8	Tnwnda.,N.Y. B12
1 3/4 x 1 1/2 x 3/16	Tnwnda.,N.Y. B12
1 3/4 x 1 1/2 x 1/4	Tnwnda.,N.Y. B12
1 3/4 x 1 1/2 x 5/16	Tnwnda.,N.Y. B12
1 3/4 x 1 1/2 x 3/8	Tnwnda.,N.Y. B12
2 x 1 1/4 x 1/8	Youngstown U5
2 x 1 1/4 x 3/16	Youngstown U5
2 x 1 1/4 x 1/4	Youngstown U5
2 x 1 1/4 x 11 ga.	Tnwnda.,N.Y. B12
2 x 1 3/8 x 1/8	Tnwnda.,N.Y. B12
2 x 1 3/8 x 3/16	Tnwnda.,N.Y. B12
2 x 1 3/8 x 1/4	Tnwnda.,N.Y. B12
2 x 1 3/8 x 5/16	Tnwnda.,N.Y. B12
2 x 1 3/8 x 3/8	Tnwnda.,N.Y. B12
2 x 1 1/2 x 11 ga.	Tnwnda.,N.Y. B12
2 x 1 1/2 x 1/8	AlabamaCity,Ala. R2
2 x 1 1/2 x 1/8	Aliquippa,Pa. J5
2 x 1 1/2 x 1/8	Atlanta A11
2 x 1 1/2 x 1/8	Gary,Ind. U5
2 x 1 1/2 x 1/8	Ind.Harbor,Ind. I-2
2 x 1 1/2 x 1/8	Knoxville,Tenn. K6
2 x 1 1/2 x 1/8	Minnequa,Colo. C10
2 x 1 1/2 x 1/8	Tnwnda.,N.Y. B12
2 x 1 1/2 x 1/8	Torrance,Calif. C11
2 x 1 1/2 x 1/8	Youngstown U5
2 x 1 1/2 x 1/8 to 3x2 1/2 x 3/8	KansasCity,Mo. S5
2 x 1 1/2 x 3/16	Tnwnda.,N.Y. B12
2 x 1 1/2 x 3/16	AlabamaCity,Ala. R2
2 x 1 1/2 x 3/16	Aliquippa,Pa. J5
2 x 1 1/2 x 3/16	Atlanta A11
2 x 1 1/2 x 3/16	Fontana,Calif. K1
2 x 1 1/2 x 3/16	Gary,Ind. U5
2 x 1 1/2 x 3/16	Ind.Harbor,Ind. I-2
2 x 1 1/2 x 3/16	Knoxville,Tenn. K6
2 x 1 1/2 x 3/16	Minnequa,Colo. C10
2 x 1 1/2 x 3/16	Niles,Calif. P1
2 x 1 1/2 x 3/16	Portland,Oreg. O4
2 x 1 1/2 x 3/16	Tnwnda.,N.Y. B12
2 x 1 1/2 x 3/16	Torrance,Calif. C11
2 x 1 1/2 x 3/16	Youngstown U5
2 x 1 1/2 x 3/16 to 6x4x3/8	Houston S5
2 x 1 1/2 x 1/4	AlabamaCity,Ala R2
2 x 1 1/2 x 1/4	Aliquippa,Pa. J5
2 x 1 1/2 x 1/4	Atlanta A11
2 x 1 1/2 x 1/4	Fontana,Calif. K1
2 x 1 1/2 x 1/4	Gary,Ind. U5
2 x 1 1/2 x 1/4	Ind.Harbor,Ind. I-2
2 x 1 1/2 x 1/4	Knoxville,Tenn. K6
2 x 1 1/2 x 1/4	Minnequa,Colo. C10
2 x 1 1/2 x 1/4	Niles,Calif. P1
2 x 1 1/2 x 1/4	Portland,Oreg. O4
2 x 1 1/2 x 1/4	Tnwnda.,N.Y. B12
2 x 1 1/2 x 1/4	Torrance,Calif. C11
2 x 1 1/2 x 1/4	Youngstown U5
2 x 1 1/2 x 5/16	Ind.Harbor,Ind. I-2
2 x 1 1/2 x 5/16	Knoxville,Tenn. K6
2 x 1 1/2 x 5/16	Minnequa,Colo. C10
2 x 1 1/2 x 5/16	Niles,Calif. P1
2 x 1 1/2 x 5/16	Portland,Oreg. O4
2 x 1 1/2 x 5/16	Torrance,Calif. C11
2 x 1 1/2 x 5/16	Youngstown U5
2 x 1 1/2 x 3/8	Fontana,Calif. K1
2 x 1 1/2 x 3/8	Gary,Ind. U5
2 x 1 1/2 x 3/8	Ind.Harbor,Ind. I-2
2 x 1 1/2 x 3/8	Knoxville,Tenn. K6
2 x 1 1/2 x 3/8	Minnequa,Colo. C10
2 x 1 1/2 x 3/8	Niles,Calif. P1
2 x 1 1/2 x 3/8	Portland,Oreg. O4
2 x 1 1/2 x 3/8	Tonawanda,N.Y. B12
2 x 1 1/2 x 3/8	Torrance,Calif. C11
2 x 1 1/2 x 3/8	Youngstown U5
2 x 1 1/2 x 7/16	Aliquippa,Pa. J5
2 x 1 1/2 x 7/16	Fontana,Calif. K1
2 x 1 1/2 x 7/16	Gary,Ind. U5
2 x 1 1/2 x 7/16	Minnequa,Colo. C10
2 x 1 1/2 x 7/16	Niles,Calif. P1
2 x 1 1/2 x 7/16	Tonawanda,N.Y. B12
2 x 1 1/2 x 7/16	Torrance,Calif. C11
2 x 1 1/2 x 7/16	Youngstown U5
2 x 1 1/2 x 1/2	Marion,O. P11
2 x 1 1/2 x 1/2	Tonawanda,N.Y. B12
2 x 1 1/2 x 1/2	Torrance,Calif. C11
2 x 1 1/2 x 1/2	Youngstown U5
2 x 1 1/2 x 5/8	Tonawanda,N.Y. B12
2 x 2 x 1/4	Knoxville,Tenn. K6
2 x 2 x 1/4	Minnequa,Colo. C10
2 x 2 x 1/4	Tonawanda,N.Y. B12
2 x 2 x 5/16	Tonawanda,N.Y. B12
2 x 2 x 5/16	AlabamaCity,Ala. R2
2 x 2 x 5/16	Aliquippa,Pa. J5
2 x 2 x 5/16	Clairton,Pa. U5
2 x 2 x 5/16	Fontana,Calif. K1
2 x 2 x 5/16	Gary,Ind. U5
2 x 2 x 5/16	Ind.Harbor,Ind. I-2
2 x 2 x 5/16	Knoxville,Tenn. K6
2 x 2 x 5/16	Minnequa,Colo. C10
2 x 2 x 5/16	Niles,Calif. P1
2 x 2 x 5/16	Pittsburg,Calif. C11
2 x 2 x 5/16	Portland,Oreg. O4
2 x 2 x 5/16	Tonawanda,N.Y. B12
2 x 2 x 5/16	Torrance,Calif. C11
2 x 2 x 5/16	Youngstown U5
2 x 2 x 3/8	AlabamaCity,Ala. R2
2 x 2 x 3/8	Aliquippa,Pa. J5
2 x 2 x 3/8	Clairton,Pa. U5
2 x 2 x 3/8	Fontana,Calif. K1
2 x 2 x 3/8	Gary,Ind. U5
2 x 2 x 3/8	Ind.Harbor,Ind. I-2
2 x 2 x 3/8	Knoxville,Tenn. K6
2 x 2 x 3/8	Minnequa,Colo. C10
2 x 2 x 3/8	Niles,Calif. P1
2 x 2 x 3/8	Portland,Oreg. O4
2 x 2 x 3/8	Tonawanda,N.Y. B12
2 x 2 x 3/8	Torrance,Calif. C11
2 x 2 x 3/8	Youngstown U5
2 x 2 x 7/16	AlabamaCity,Ala. R2
2 x 2 x 7/16	Aliquippa,Pa. J5
2 x 2 x 7/16	Clairton,Pa. U5
2 x 2 x 7/16	Fontana,Calif. K1
2 x 2 x 7/16	Gary,Ind. U5
2 x 2 x 7/16	Ind. Harbor,Ind. I-2
2 1/2 x 2 x 1/4	Knoxville,Tenn. K6
2 1/2 x 2 x 1/4	Minnequa,Colo. C10
2 1/2 x 2 x 1/4	Niles,Calif. P1
2 1/2 x 2 x 1/4	Portland,Oreg. O4
2 1/2 x 2 x 1/4	Tonawanda,N.Y. B12
2 1/2 x 2 x 1/4	Torrance,Calif. C11
2 1/2 x 2 x 1/4	Youngstown U5
2 1/2 x 2 x 5/16	Gary,Ind. U5
2 1/2 x 2 x 5/16	Ind.Harbor,Ind. I-2
2 1/2 x 2 x 5/16	Knoxville,Tenn. K6
2 1/2 x 2 x 5/16	Minnequa,Colo. C10
2 1/2 x 2 x 5/16	Niles,Calif. P1
2 1/2 x 2 x 5/16	Portland,Oreg. O4
2 1/2 x 2 x 5/16	Tonawanda,N.Y. B12
2 1/2 x 2 x 5/16	Torrance,Calif. C11
2 1/2 x 2 x 5/16	Youngstown U5
2 1/2 x 2 x 3/8	Aliquippa,Pa. J5
2 1/2 x 2 x 3/8	Clairton,Pa. U5
2 1/2 x 2 x 3/8	Fontana,Calif. K1
2 1/2 x 2 x 3/8	Gary,Ind. U5
2 1/2 x 2 x 3/8	Ind. Harbor,Ind. I-2
2 1/2 x 2 x 3/8	Knoxville,Tenn. K6
2 1/2 x 2 x 3/8	Minnequa,Colo. C10
2 1/2 x 2 x 3/8	Niles,Calif. P1
2 1/2 x 2 x 3/8	Portland,Oreg. O4
2 1/2 x 2 x 3/8	Tonawanda,N.Y. B12
2 1/2 x 2 x 3/8	Torrance,Calif. C11
2 1/2 x 2 x 3/8	Youngstown U5
2 1/2 x 2 x 7/16	Gary,Ind. U5
2 1/2 x 2 x 7/16	Ind.Harbor,Ind. I-2
2 1/2 x 2 x 7/16	Knoxville,Tenn. K6
2 1/2 x 2 x 7/16	Minnequa,Colo. C10
2 1/2 x 2 x 7/16	Niles,Calif. P1
2 1/2 x 2 x 7/16	Portland,Oreg. O4
2 1/2 x 2 x 7/16	Tonawanda,N.Y. B12
2 1/2 x 2 x 7/16	Torrance,Calif. C11
2 1/2 x 2 x 7/16	Youngstown U5
2 1/2 x 2 x 1/2	AlabamaCity,Ala. R2
2 1/2 x 2 x 1/2	Aliquippa,Pa. J5
2 1/2 x 2 x 1/2	Clairton,Pa. U5
2 1/2 x 2 x 1/2	Fontana,Calif. K1
2 1/2 x 2 x 1/2	Gary,Ind. U5
2 1/2 x 2 x 1/2	Ind. Harbor,Ind. I-2
2 1/2 x 2 x 1/2	Knoxville,Tenn. K6
2 1/2 x 2 x 1/2	Minnequa,Colo. C10
2 1/2 x 2 x 1/2	Niles,Calif. P1
2 1/2 x 2 x 1/2	Portland,Oreg. O4
2 1/2 x 2 x 1/2	Tonawanda,N.Y. B12
2 1/2 x 2 x 1/2	Torrance,Calif. C11
2 1/2 x 2 x 1/2	Youngstown U5
2 1/2 x 2 x 5/8	Gary,Ind. U5
2 1/2 x 2 x 5/8	Ind.Harbor,Ind. I-2
2 1/2 x 2 x 5/8	Knoxville,Tenn. K6
2 1/2 x 2 x 5/8	Minnequa,Colo. C10
2 1/2 x 2 x 5/8	Niles,Calif. P1
2 1/2 x 2 x 5/8	Portland,Oreg. O4
2 1/2 x 2 x 5/8	Tonawanda,N.Y. B12
2 1/2 x 2 x 5/8	Torrance,Calif. C11
2 1/2 x 2 x 5/8	Youngstown U5
2 1/2 x 2 x 3/4	Aliquippa,Pa. J5
2 1/2 x 2 x 3/4	Clairton,Pa. U5
2 1/2 x 2 x 3/4	Fontana,Calif. K1
2 1/2 x 2 x 3/4	Gary,Ind. U5
2 1/2 x 2 x 3/4	Ind. Harbor,Ind. I-2
2 1/2 x 2 x 3/4	Knoxville,Tenn. K6
2 1/2 x 2 x 3/4	Minnequa,Colo. C10
2 1/2 x 2 x 3/4	Niles,Calif. P1
2 1/2 x 2 x 3/4	Portland,Oreg. O4
2 1/2 x 2 x 3/4	Tonawanda,N.Y. B12
2 1/2 x 2 x 3/4	Torrance,Calif. C11
2 1/2 x 2 x 3/4	Youngstown U5
2 1/2 x 2 x 7/8	Gary,Ind. U5
2 1/2 x 2 x 7/8	Ind.Harbor,Ind. I-2
2 1/2 x 2 x 7/8	Knoxville,Tenn. K6
2 1/2 x 2 x 7/8	Minnequa,Colo. C10
2 1/2 x 2 x 7/8	Niles,Calif. P1
2 1/2 x 2 x 7/8	Portland,Oreg. O4
2 1/2 x 2 x 7/8	Tonawanda,N.Y. B12
2 1/2 x 2 x 7/8	Torrance,Calif. C11
2 1/2 x 2 x 7/8	Youngstown U5
2 1/2 x 2 x 1	Aliquippa,Pa. J5
2 1/2 x 2 x 1	Clairton,Pa. U5
2 1/2 x 2 x 1	Fontana,Calif. K1
2 1/2 x 2 x 1	Gary,Ind. U5
2 1/2 x 2 x 1	Ind. Harbor,Ind. I-2
2 1/2 x 2 x 1	Knoxville,Tenn. K6
2 1/2 x 2 x 1	Minnequa,Colo. C10
2 1/2 x 2 x 1	Niles,Calif. P1
2 1/2 x 2 x 1	Portland,Oreg. O4
2 1/2 x 2 x 1	Tonawanda,N.Y. B12
2 1/2 x 2 x 1	Torrance,Calif. C11
2 1/2 x 2 x 1	Youngstown U5
2 1/2 x 2 x 1 1/4	Gary,Ind. U5
2 1/2 x 2 x 1 1/4	Ind.Harbor,Ind. I-2
2 1/2 x 2 x 1 1/4	Knoxville,Tenn. K6
2 1/2 x 2 x 1 1/4	Minnequa,Colo. C10
2 1/2 x 2 x 1 1/4	Niles,Calif. P1
2 1/2 x 2 x 1 1/4	Portland,Oreg. O4
2 1/2 x 2 x 1 1/4	Tonawanda,N.Y. B12
2 1/2 x 2 x 1 1/4	Torrance,Calif. C11
2 1/2 x 2 x 1 1/4	Youngstown U5
2 1/2 x 2 x 1 1/2	Gary,Ind. U5
2 1/2 x 2 x 1 1/2	Ind.Harbor,Ind. I-2
2 1/2 x 2 x 1 1/2	Knoxville,Tenn. K6
2 1/2 x 2 x 1 1/2	Minnequa,Colo. C10
2 1/2 x 2 x 1 1/2	Niles,Calif. P1
2 1/2 x 2 x 1 1/2	Portland,Oreg. O4
2 1/2 x 2 x 1 1/2	Tonawanda,N.Y. B12
2 1/2 x 2 x 1 1/2	Torrance,Calif. C11
2 1/2 x 2 x 1 1/2	Youngstown U5
2 1/2 x 2 x 1 3/4	Gary,Ind. U5
2 1/2 x 2 x 1 3/4	Ind.Harbor,Ind. I-2
2 1/2 x 2 x 1 3/4	Knoxville,Tenn. K6
2 1/2 x 2 x 1 3/4	Minnequa,Colo. C10
2 1/2 x 2 x 1 3/4	Niles,Calif. P1
2 1/2 x 2 x 1 3/4	Portland,Oreg. O4
2 1/2 x 2 x 1 3/4	Tonawanda,N.Y. B12
2 1/2 x 2 x 1 3/4	Torrance,Calif. C11
2 1/2 x 2 x 1 3/4	Youngstown U5
2 1/2 x 2 x 2	Gary,Ind. U5
2 1/2 x 2 x 2	Ind.Harbor,Ind. I-2
2 1/2 x 2 x 2	Knoxville,Tenn. K6
2 1/2 x 2 x 2	Minnequa,Colo. C10
2 1/

HOT-ROLLED BAR SIZE SHAPES (Carbon Steel)

(Code number following mill point indicates producing company, key on page 38)

Tees, Unequal Leg

Flange Width by Thickness	Stem Height by Thickness	Mill Point, Producer
⅝x⅜	4⅝x—	Gary,Ind. U5
1¼x.140	2.074x—	Youngstown U5
2x.109	1.312x—	Youngstown U5
2x.112	1 5/16x—	Youngstown U5
2x.128	1½x—	Youngstown U5
2x.128	1⅝x—	Youngstown U5
2x¼	1½x—	Gary,Ind. U5
2 17/64	1½x—	Youngstown U5
3x⅝	1¾x—	Gary,Ind. U5
3½x⅛	1x⅞	Tonawanda,N.Y. B12
3½x⅛	1x⅛	Tonawanda,N.Y. B12

Channels

Sizes Produced (inches)	Mill Point, Producer
¼x¼x⅛	Youngstown U5
¼x¼x.07	Milton,Pa. B6
¼x¼x.09	Milton,Pa. B6
¼x¼x.108	Milton,Pa. B6
⅜x⅜x⅛	Atlanta A11
⅜x⅜x⅛	Youngstown U5
⅜x⅜x⅛ to 2½x⅝x⅜	Johnstown,Pa. B2
⅜x⅜x.109	Milton,Pa. B6
½x½x.072	Youngstown U5
½x½x.12	Milton,Pa. B6
½x½x⅛	Atlanta A11
½x½x⅛	Gary,Ind. U5
½x½x⅛	Youngstown U5
½x½x⅛ to 1¾x1½x5/16	LosAngeles B3
½x½x⅛ to 2x1x⅜	SanFrancisco B3
½x½x⅛	Atlanta A11
½x½x⅛	Gary,Ind. U5
½x½x⅛	Youngstown U5
½x½x⅛	Atlanta A11
½x½x⅛	Youngstown U5
1x½x.07	Milton,Pa. B6
1x½x.09	Milton,Pa. B6
1x⅝x13 ga.	Tonawanda,N.Y. B12
1x⅝x12 ga.	Tonawanda,N.Y. B12
1x⅝x⅛	Gary,Ind. U5
1x⅝x⅛	Madison,Ill. L1
1x⅝x⅛	Marion,O. P11
1x⅝x⅛	Tonawanda,N.Y. B12
1x⅝x⅛	Youngstown U5
1x¾x.10	Milton,Pa. B6
1x¾x.12	Milton,Pa. B6
1x¾x⅛	Atlanta A11
1x¾x⅛	Gary,Ind. U5
1x¾x⅛	Knoxville,Tenn. K6
1x¾x⅛	Torrance,Calif. C11
1x¾x⅛	Youngstown U5
1x⅞x⅛	Madison,Ill. L1
1¼x⅝x⅛	KansasCity,Mo. S5
1¼x⅝x⅛	Youngstown U5
1¼x½x⅛	Atlanta A11
1¼x½x⅛	Gary,Ind. U5
1¼x½x⅛	KansasCity,Mo. S5
1¼x½x⅛	Torrance,Calif. C11
1¼x½x⅛	Youngstown U5
1¼x⅝x⅛	Knoxville,Tenn. K6
1¼x⅝x⅜	Tonawanda,N.Y. B12
1¼x⅝x⅜	Tonawanda,N.Y. B12
1¼x⅝x⅜	Tonawanda,N.Y. B12
1¼x¾x⅛	Marion,O. P11
1¼x¾x⅛	Marion,O. P11
1½x¾x⅛	Marion,O. P11
1½x¾x⅛	Marion,O. P11
1½x⅞x⅜	Tonawanda,N.Y. B12
1½x⅞x.075	Milton,Pa. B6
1½x⅞x.083	Milton,Pa. B6
1½x1x⅛	Tonawanda,N.Y. B12
1½x1x.09	Milton,Pa. B6
1½x1x.10	Milton,Pa. B6
1½x1x.11	Milton,Pa. B6
1½x1x1½	Atlanta A11
1½x1x1¼	Gary,Ind. U5
1½x1x1¼	KansasCity,Mo. S5
1½x1x1¼	Knoxville,Tenn. K6
1½x1x1¼	Milton,Pa. B6
1½x1x1¼	Tonawanda,N.Y. B12
1½x1x1¼	Torrance,Calif. C11
1½x1x1¼	Youngstown U5
1½x1x1¼	Knoxville,Tenn. K6
1½x1x1¼	Tonawanda,N.Y. B12
1½x1x1¼	Youngstown U5
1½x1x⅛	Atlanta A11
1½x1x⅜	Gary,Ind. U5
1½x1x⅜	Tonawanda,N.Y. B12
1½x1x⅜	Tonawanda,N.Y. B12
1½x1x¼	Gary,Ind. U5
1½x1x¼	Gary,Ind. U5
1½x1x¼	Atlanta A11
1½x1x¼	Youngstown U5
2x1½x⅛	Atlanta A11
2x1½x⅛	Youngstown U5
2x1½x⅛	Atlanta A11
2x1½x⅛	Gary,Ind. U5
2x1½x⅜	Youngstown U5
2x1½x⅜	Atlanta A11
2x1½x⅜	Gary,Ind. U5
2x1½x⅜	Tonawanda,N.Y. B12
2x1½x⅜	Tonawanda,N.Y. B12
2x1½x¼	Gary,Ind. U5
2x1½x¼	Gary,Ind. U5
2x1½x¼	Atlanta A11
2x1½x¼	Youngstown U5
2x1½x¼	Atlanta A11
2x1½x¼	Gary,Ind. U5
2x1½x¼	Youngstown U5
2x1½x¼	Atlanta A11
2x1½x¼	Gary,Ind. U5
2x1½x¼	Youngstown U5
2x1½x¼	Atlanta A11
2x1½x¼	Youngstown U5
2x1½x¼	Atlanta A11
2x1½x¼	Gary,Ind. U5
2x1½x¼	Youngstown U5
2x1½x¼	Atlanta A11
2x1½x¼	Youngstown U5
2x1½x¼	Atlanta A11
2x1½x¼	Youngstown U5
2x1½x¼	Atlanta A11
2x1½x¼	Gary,Ind. U5
2x1½x¼	Youngstown U5
2x1½x¼	Atlanta A11
2x1½x¼	Gary,Ind. U5
2x1½x¼	Youngstown U5
2x1½x¼	Atlanta A11
2x1½x¼	Gary,Ind. U5
2x1½x¼	Youngstown U5
2x1½x¼	Atlanta A11

MECHANICAL TUBING

(Code number following mill point indicates producing company, key on page 38)

○ Round—Welded, Hot-Rolled

Wall Thickness (inches)	Outside Dimensions (inches)	Mill Point, Producer
.028–.260	⅜–5⅛	Detroit S14
.042–.062	.625	Alton,Ill. L1
.042–.070	.706	Alton,Ill. L1
.042–.075	.750	Alton,Ill. L1
.042–.080	1.000	Alton,Ill. L1
.042–.080	1.315	Alton,Ill. L1
.042–.083	.875	Alton,Ill. L1
.042–.083	.922	Alton,Ill. L1
.042–.100	1.050	Alton,Ill. L1
.042–.112	1.125	Alton,Ill. L1
.042–.116	1.163	Alton,Ill. L1
.042–.120	1.250	Alton,Ill. L1
.049–.165	½–4	Farrell,Pa. B9
.050–.120	1.500	Alton,Ill. L1
.050–.120	1.510	Alton,Ill. L1
.050–.120	1.740	Alton,Ill. L1
.050–.120	1.750	Alton,Ill. L1
.062–.120	2.000	Alton,Ill. L1
.062–.120	2.197	Alton,Ill. L1
.062–.120	2.375	Alton,Ill. L1
.063–.083	1½–3	Piqua,O. A10
.065	½–3	Sharon,Pa. S21
.065	½–4	OilCity,Pa. J5
.065	¾–2	Evanston,Ill. M15
.065	¾–4	Toledo,O. T8
.065	1	Warren,O. V4
.065	1⅛	Warren,O. V4
.065	1¼	Warren,O. V4
.065	1⅜	Warren,O. V4
.065	1⅝	Warren,O. V4
.065	1⅛	Warren,O. V4
.065	1⅞	Warren,O. V4
.065	1¼	Warren,O. V4
.065	1⅛	Warren,O. V4
.065	1.335	Warren,O. V4
.065	1.355	Warren,O. V4
.065	1⅜	Warren,O. V4
.065	1.400	Warren,O. V4
.065	1½	Warren,O. V4
.065	1.555	Warren,O. V4
.065	1⅝	Warren,O. V4
.065	1⅛	Warren,O. V4
.065	1.670	Warren,O. V4
.065	1¼	Warren,O. V4
.065	1¾	Warren,O. V4
.065	1.786	Warren,O. V4
.065	1⅞	Warren,O. V4
.065	1.9	Warren,O. V4
.065	1⅛	Warren,O. V4
.065	2	Warren,O. V4
.065	2⅛	Warren,O. V4
.065	2⅛	Warren,O. V4
.065	2⅛	Warren,O. V4
.065	2.205	Warren,O. V4
.065	2¼	Warren,O. V4
.065	2.343	Warren,O. V4
.065	2⅜	Warren,O. V4
.065	2½	Warren,O. V4
.065	2⅝	Warren,O. V4
.065	2⅝	Warren,O. V4
.065	2¾	Warren,O. V4
.065	2⅞	Warren,O. V4
.065	2.905	Warren,O. V4
.065	2⅛	Warren,O. V4
.065	2⅛	Warren,O. V4
.065	3	Warren,O. V4
.065	3⅛	Warren,O. V4
.065	3⅛	Warren,O. V4
.065	3¼	Warren,O. V4
.065	3⅜	Warren,O. V4
.065–.083	¾	Ferndale,Mich. R2
.065–.083	⅞	Ferndale,Mich. R2
.065–.083	1	Ferndale,Mich. R2
.065–.083	1¼	Ferndale,Mich. R2
.065–.095	¾	Brooklyn,N.Y. R2
.065–.095	¾	Cleveland R2
.065–.095	⅞	Brooklyn,N.Y. R2
.065–.095	⅞	Cleveland R2
.065–.095	4¼	Brooklyn,N.Y. R2
.065–.120	¾–3	Shelby,O. O2
.065–.120	1	Brooklyn,N.Y. R2
.065–.120	1	Cleveland R2
.065–.120	1¼	Brooklyn,N.Y. R2
.065–.120	1¼	Cleveland R2
.065–.120	1¼	Brooklyn,N.Y. R2
.065–.120	1¼	Cleveland R2
.065–.120	1¼	Ferndale,Mich. R2
.065–.120	1⅜	Brooklyn,N.Y. R2
.065–.120	1⅜	Cleveland R2
.065–.120	1⅜	Ferndale,Mich. R2
.065–.120	1½	Ferndale,Mich. R2
.065–.120	1⅝	Ferndale,Mich. R2
.065–.120	1¾	Ferndale,Mich. R2
.065–.120	1⅞	Ferndale,Mich. R2
.065–.134	⅜–3	LosAngeles P2
.065–.134	1⅛	Brooklyn,N.Y. R2
.065–.134	1½	Cleveland R2
.065–.134	2	Ferndale,Mich. R2
.065–.134	2¼	Ferndale,Mich. R2
.065–.134	2¼	Ferndale,Mich. R2
.065–.134	2⅜	Ferndale,Mich. R2
.065–.134	2½	Ferndale,Mich. R2
.065–.134	2⅝	Ferndale,Mich. R2
.065–.148	1⅜	Brooklyn,N.Y. R2
.065–.148	1¾	Brooklyn,N.Y. R2
.065–.148	1⅞	Brooklyn,N.Y. R2
.065–.148	2	Brooklyn,N.Y. R2
.065–.148	2⅛	Brooklyn,N.Y. R2
.065–.148	2¼	Brooklyn,N.Y. R2
.065–.148	2⅜	Brooklyn,N.Y. R2
.065–.148	2½	Brooklyn,N.Y. R2
.065–.148	2⅝	Brooklyn,N.Y. R2
.065–.148	2¾	Brooklyn,N.Y. R2
.065–.148	2⅞	Brooklyn,N.Y. R2
.065–.148	3	Brooklyn,N.Y. R2
.065–.148	3⅛	Brooklyn,N.Y. R2
.065–.148	3¼	Brooklyn,N.Y. R2
.065–.148	3⅜	Brooklyn,N.Y. R2
.065–.148	3½	Brooklyn,N.Y. R2
.065–.148	3⅝	Brooklyn,N.Y. R2
.065–.148	3¾	Brooklyn,N.Y. R2
.065–.148	3⅞	Brooklyn,N.Y. R2
.065–.148	4	Brooklyn,N.Y. R2
.065–.165	1⅝	Cleveland R2
.065–.165	1¾	Cleveland R2
.065–.180	1⅞	Cleveland R2
.065–.203	2	Cleveland R2
.065–.203	2⅛	Cleveland R2
.065–.220	2¼	Cleveland R2
.065–.220	2⅜	Cleveland R2
.065–.220	2½	Cleveland R2
.065–.220	2⅝	Cleveland R2
.065–.220	2¾	Cleveland R2
.065–.220	2⅞	Cleveland R2
.065–.220	3	Cleveland R2
.065–.220	3¼	Cleveland R2
.065–.220	3⅜	Cleveland R2
.065–.220	3½	Cleveland R2
.065–.220	3⅝	Cleveland R2
.065–.220	3¾	Cleveland R2
.065–.220	3⅞	Cleveland R2
.065–.220	4	Cleveland R2
.065–.220	4½	Cleveland R2
.065–.220	5	Cleveland R2
.072	½–3	Sharon,Pa. S21
.083	⅝	Warren,O. V4
.083	⅝–3	Sharon,Pa. S21
.083	.665	Warren,O. V4
.083	¾	Warren,O. V4
.083	¾	Warren,O. V4
.083	¾–2	Evanston,Ill. M15
.083	¾–4	OilCity,Pa. J5
.083	⅞	Warren,O. V4
.083	⅞	Warren,O. V4
.083	1	Warren,O. V4
.083	1⅛	Warren,O. V4
.083	1⅛	Warren,O. V4
.083	1⅛	Warren,O. V4
.083	1⅛	Warren,O. V4
.083	1⅜	Warren,O. V4
.083	1⅜	Warren,O. V4
.083	1⅜	Warren,O. V4
.083	1⅜	Warren,O. V4
.083	1.335	Warren,O. V4
.083	1.355	Warren,O. V4
.083	1⅜	Warren,O. V4
.083	1.400	Warren,O. V4
.083	1½	Warren,O. V4
.083	1.555	Warren,O. V4
.083	1⅝	Warren,O. V4
.083	1⅝	Warren,O. V4
.083	1.670	Warren,O. V4
.083	1¾	Warren,O. V4
.083	1¾	Warren,O. V4
.083	1.786	Warren,O. V4
.083	1⅞	Warren,O. V4
.083	1.9	Warren,O. V4
.083	1⅛	Warren,O. V4
.083	2	Warren,O. V4
.083	2⅛	Warren,O. V4
.083	2⅛	Warren,O. V4
.083	2⅛	Warren,O. V4
.083	2.205	Warren,O. V4
.083	2¼	Warren,O. V4
.083	2.343	Warren,O. V4
.083	2⅜	Warren,O. V4
.083	2½	Warren,O. V4
.083	2⅝	Warren,O. V4
.083	2⅝	Warren,O. V4
.083	2¾	Warren,O. V4
.083	2⅞	Warren,O. V4
.083	2.905	Warren,O. V4
.083	2⅛	Warren,O. V4
.083	2⅛	Warren,O. V4
.083	3	Warren,O. V4
.083	3⅛	Warren,O. V4
.083	3⅛	Warren,O. V4
.083	3¼	Warren,O. V4
.083	3⅜	Warren,O. V4
.095	¼	Brooklyn,N.Y. R2
.095	¼	Cleveland R2
.095	¾–3	Sharon,Pa. S21
.095	⅞	Warren,O. V4
.095	⅛	Warren,O. V4
.095	1	Warren,O. V4
.095	1–2	Evanston,Ill. M15
.095	1–4	OilCity,Pa. J5
.095	1⅛	Warren,O. V4
.095	1⅛	Warren,O. V4
.095	1⅛	Warren,O. V4
.095	1⅛	Warren,O. V4
.095	1⅜	Warren,O. V4
.095	1⅜	Warren,O. V4
.095	1⅜	Warren,O. V4
.095	1⅜	Warren,O. V4
.095	1.335	Warren,O. V4
.095	1.355	Warren,O. V4
.095	1⅜	Warren,O. V4
.095	1.400	Warren,O. V4
.095	1½	Warren,O. V4
.095	1.555	Warren,O. V4
.095	1⅝	Warren,O. V4
.095	1⅝	Warren,O. V4
.095	1.670	Warren,O. V4
.095	1¾	Warren,O. V4
.095	1¾	Warren,O. V4
.095	1.786	Warren,O. V4
.095	1⅞	Warren,O. V4
.095	1.9	Warren,O. V4
.095	1⅛	Warren,O. V4
.095	2	Warren,O. V4
.095	2⅛	Warren,O. V4
.095	2⅛	Warren,O. V4
.095	2⅛	Warren,O. V4
.095	2.205	Warren,O. V4
.095	2¼	Warren,O. V4
.095	2.343	Warren,O. V4
.095	2⅜	Warren,O. V4
.095	2½	Warren,O. V4
.095	2⅝	Warren,O. V4
.095	2⅝	Warren,O. V4
.095	2¾	Warren,O. V4
.095	2⅞	Warren,O. V4
.095	2.905	Warren,O. V4
.095	2⅛	Warren,O. V4
.095	2⅛	Warren,O. V4
.095	3	Warren,O. V4
.095	3⅛	Warren,O. V4
.095	3⅛	Warren,O. V4
.095	3¼	Warren,O. V4
.095	3⅜	Warren,O. V4
.109	¾–3	Sharon,Pa. S21
.109	⅛	Warren,O. V4
.109	1	Warren,O. V4
.109	1–4	OilCity,Pa. J5
.109	1⅛	Warren,O. V4
.109	1⅛	Warren,O. V4
.109	1⅛	Warren,O. V4
.109	1⅜	Warren,O. V4
.109	1⅜	Warren,O. V4
.109	1⅜	Warren,O. V4
.109	1⅜	Warren,O. V4
.109	1.335	Warren,O. V4
.109	1.355	Warren,O. V4
.109	1⅜	Warren,O. V4
.109	1.400	Warren,O. V4
.109	1½	Warren,O. V4
.109	1.555	Warren,O. V4
.109	1⅝	Warren,O. V4
.109	1⅝	Warren,O. V4
.109	1.670	Warren,O. V4
.109	1¾	Warren,O. V4
.109	1¾	Warren,O. V4
.109	1.786	Warren,O. V4
.109	1⅞	Warren,O. V4
.109	1.9	Warren,O. V4
.109	1⅛	Warren,O. V4
.109	2	Warren,O. V4
.109	2⅛	Warren,O. V4
.109	2⅛	Warren,O. V4
.109	2⅛	Warren,O. V4
.109	2.205	Warren,O. V4
.109	2¼	Warren,O. V4
.109	2.343	Warren,O. V4
.109	2⅜	Warren,O. V4
.109	2½	Warren,O. V4
.109	2⅝	Warren,O. V4
.109	2⅝	Warren,O. V4
.109	2¾	Warren,O. V4
.109	2⅞	Warren,O. V4
.109	2.905	Warren,O. V4
.109	2⅛	Warren,O. V4
.109	2⅛	Warren,O. V4
.109	3	Warren,O. V4
.109	3⅛	Warren,O. V4
.109	3⅛	Warren,O. V4
.109	3¼	Warren,O. V4
.109	3⅜	Warren,O. V4
.120	1	Warren,O. V4
.120	1⅛	Warren,O. V4
.120	1⅛	Warren,O. V4
.120	1⅛	Warren,O. V4
.120	1⅜	Warren,O. V4
.120	1⅜	Warren,O. V4
.120	1⅜	Warren,O. V4
.120	1⅜	Warren,O. V4
.120	1¼	Sharon,Pa. S21
.120	1¼–3	Sharon,Pa. S21
.120	1⅜	Warren,O. V4
.120	1⅜	Warren,O. V4
.120	1.335	Warren,O. V4
.120	1.355	Warren,O. V4
.120	1⅜	Warren,O. V4
.120	1.400	Warren,O. V4
.120	1½–4	OilCity,Pa. J5
.120	1½	Warren,O. V4
.120	1.555	Warren,O. V4
.120	1⅝	Warren,O. V4

MECHANICAL TUBING

(Code number following mill point indicates producing company, key on page 38)

Round—Welded, Hot-Rolled

CONTINUED FROM PRECEDING PAGE

Wall Thickness (inches)	Outside Dimensions (inches)	Mill Point, Producer
.120	1⅝	Warren,O. V4
.120	1.670	Warren,O. V4
.120	1 11/16	Warren,O. V4
.120	1¾	Warren,O. V4
.120	1.786	Warren,O. V4
.120	1⅞	Warren,O. V4
.120	1.9	Warren,O. V4
.120	1 15/16	Warren,O. V4
.120	2	Warren,O. V4
.120	2 1/16	Warren,O. V4
.120	2⅛	Warren,O. V4
.120	2 3/16	Warren,O. V4
.120	2.205	Warren,O. V4
.120	2¼	Warren,O. V4
.120	2.343	Warren,O. V4
.120	2⅜	Warren,O. V4
.120	2½	Warren,O. V4
.120	2⅝	Warren,O. V4
.120	2¾	Warren,O. V4
.120	2.905	Warren,O. V4
.120	2 15/16	Warren,O. V4
.120	3	Warren,O. V4
.120	3 1/16	Warren,O. V4
.120	3⅛	Warren,O. V4
.120	3 3/16	Warren,O. V4
.120	3¼	Warren,O. V4
.120	3⅜	Warren,O. V4
.134	1¼–3	Sharon,Pa. S21
.134	1⅝	Warren,O. V4
.134	1.670	Warren,O. V4
.134	1 11/16	Warren,O. V4
.134	1¾	Warren,O. V4
.134	1.786	Warren,O. V4
.134	1⅞	Warren,O. V4
.134	1.9	Warren,O. V4
.134	1 15/16	Warren,O. V4
.134	2	Warren,O. V4
.134	2–4	OilCity,Pa. J5
.134	2⅛	Warren,O. V4
.134	2¼	Warren,O. V4
.134	2⅜	Warren,O. V4
.134	2.205	Warren,O. V4
.134	2¼	Warren,O. V4
.134	2.343	Warren,O. V4
.134	2⅜	Warren,O. V4
.134	2½	Warren,O. V4
.134	2⅝	Warren,O. V4
.134	2¾	Warren,O. V4
.134	2.905	Warren,O. V4
.134	2 15/16	Warren,O. V4
.134	3	Warren,O. V4
.134	3 1/16	Warren,O. V4
.134	3⅛	Warren,O. V4
.134	3¼	Warren,O. V4
.134	3⅜	Warren,O. V4

Square—Welded, Hot-Rolled

.028–.260	⅜–4	Detroit S14
.049–.083	½–2	Farrell,Pa. B9
.063–.083	¾–2¼	Piqua,O. A10
.065	½–3⅜	OilCity,Pa. J5
.065	1 1/16	Warren,O. V4
.065	⅛	Warren,O. V4
.065	1	Warren,O. V4
.065	1⅛	Warren,O. V4
.065	1 3/16	Warren,O. V4
.065	1¼	Warren,O. V4
.065	1 5/16	Warren,O. V4
.065	1⅜	Warren,O. V4
.065	2	Warren,O. V4
.065	2½	Warren,O. V4
.065–.134	¼–1½	LosAngeles P2
.083	¾–3⅜	OilCity,Pa. J5
.083	⅞	Warren,O. V4
.083	1	Warren,O. V4
.083	1¼	Warren,O. V4
.083	1 5/16	Warren,O. V4
.083	1⅜	Warren,O. V4
.083	1 7/16	Warren,O. V4
.083	1½	Warren,O. V4
.083	1 9/16	Warren,O. V4
.083	1⅝	Warren,O. V4
.083	1 11/16	Warren,O. V4
.083	1¾	Warren,O. V4
.083	1 13/16	Warren,O. V4
.083	1⅞	Warren,O. V4
.083	1 15/16	Warren,O. V4
.083	2	Warren,O. V4
.083	2 1/16	Warren,O. V4
.095	1	Warren,O. V4
.095	1⅛	Warren,O. V4
.095	1 3/16	Warren,O. V4
.095	1¼	Warren,O. V4
.095	1⅜	Warren,O. V4
.095	1½–3⅛	OilCity,Pa. J5
.095	1¾	Warren,O. V4
.095	2	Warren,O. V4
.095	2½	Warren,O. V4
.109	1¼	Warren,O. V4
.109	1½	Warren,O. V4
.109	1⅝	Warren,O. V4
.109	2	Warren,O. V4
.109	2 3/16	OilCity,Pa. J5
.109	2½	Warren,O. V4
.120	1¼	Warren,O. V4
.120	1½	Warren,O. V4
.120	1⅝	Warren,O. V4
.120	2	Warren,O. V4
.120	2 3/16	OilCity,Pa. J5
.120	2½	Warren,O. V4
.134	1½	Warren,O. V4
.134	1¾	Warren,O. V4
.134	2	Warren,O. V4
.134	2–3⅛	OilCity,Pa. J5
.134	2½	Warren,O. V4

Republic Steel Corp.'s Steel & Tubes Division also produces this product at Brooklyn, N. Y., Ferndale, Mich., and Cleveland.

Rectangular—Welded, Hot-Rolled

.028–.260	⅜x¾ to 3½x4	Detroit S14
.063–.083	⅜x⅝ to 9 sq. in.	Piqua,O. A10
.065	⅜x⅝	Warren,O. V4
.065	⅝x1	Warren,O. V4
.065	⅝x2⅝	Warren,O. V4
.065	½x⅝ to 2½x3¾	OilCity,Pa. J5
.065	½x1	Warren,O. V4
.065	½x1 1/16	Warren,O. V4
.065	½x1⅜	Warren,O. V4
.065	½x1½	Warren,O. V4
.065	⅝x1½	Warren,O. V4
.065	¾x1 7/16	Warren,O. V4
.065	¾x1⅝	Warren,O. V4
.065	¾x1½	Warren,O. V4
.065	⅞x1⅝	Warren,O. V4
.065	1x1⅛	Warren,O. V4
.065	1x1¼	Warren,O. V4
.065	1x1⅜	Warren,O. V4
.065	1x1½	Warren,O. V4
.065	1x2	Warren,O. V4
.065	1x2½	Warren,O. V4
.065	1½x2	Warren,O. V4
.065	1½x2½	Warren,O. V4
.065	1½x3	Warren,O. V4
.065	1⅝x3	Warren,O. V4
.065–.134	¼x⅜ to ¾x2	LosAngeles P2
.083	⅝x1	Warren,O. V4
.083	½x1	Warren,O. V4
.083	½x1⅛	Warren,O. V4
.083	½x1⅜	Warren,O. V4
.083	½x1½	Warren,O. V4
.083	⅝x1½	Warren,O. V4
.083	¾x1⅜	Warren,O. V4
.083	¾x1½	Warren,O. V4
.083	¾x1⅝	Warren,O. V4
.083	¾x1¾	Warren,O. V4
.083	¾x1 13/16	Warren,O. V4
.083	¾x1⅞	Warren,O. V4
.083	¾x1 15/16	Warren,O. V4
.083	¾x2	Warren,O. V4
.083	⅞x1½	Warren,O. V4
.083	1x1⅛	Warren,O. V4
.083	1x1¼	Warren,O. V4
.083	1x1⅜	Warren,O. V4
.083	1x1½	Warren,O. V4
.083	1x2	Warren,O. V4
.083	1x2½	Warren,O. V4
.083	1½x2	Warren,O. V4
.083	1½x2½	Warren,O. V4
.083	1½x3	Warren,O. V4
.083	2x3	Warren,O. V4
.095	¾x1⅜	Warren,O. V4
.095	¾x1½	Warren,O. V4
.095	⅞x1½	Warren,O. V4
.095	⅞x1⅝	Warren,O. V4
.095	1x1⅛	Warren,O. V4
.095	1x1¼	Warren,O. V4
.095	1x1⅜	Warren,O. V4
.095	1x1½	Warren,O. V4
.095	1x2	Warren,O. V4
.095	1x2½	Warren,O. V4
.095	1½x2	Warren,O. V4
.095	1½x2½	Warren,O. V4
.095	1½x3	Warren,O. V4
.095	1⅝x3	Warren,O. V4
.095	2x3	Warren,O. V4
.095	1½x1⅝ to 2½x3¾	OilCity,Pa. J5
.095	1½x2	Warren,O. V4
.095	1½x3	Warren,O. V4
.095	1⅝x3	Warren,O. V4
.095	2x3	Warren,O. V4
.109	¾x1¼	Warren,O. V4
.109	⅞x1⅜	Warren,O. V4
.109	1x1⅜	Warren,O. V4
.109	1x1¼	Warren,O. V4
.109	1x1⅝	Warren,O. V4
.109	1x1½	Warren,O. V4
.109	1x2	Warren,O. V4
.109	1x2¼	Warren,O. V4
.109	1⅛x2	Warren,O. V4
.109	1 7/16x1 11/16	Warren,O. V4
.109	1½x2	Warren,O. V4
.109	1½x3	Warren,O. V4
.109	1⅝x3	Warren,O. V4
.109	2x2⅛ to 2½x3¾	OilCity,Pa. J5
.109	2x3	Warren,O. V4
.120	1x1½	Warren,O. V4
.120	1x2	Warren,O. V4
.120	1x2¼	Warren,O. V4
.120	1x2½	Warren,O. V4
.120	1¼x2	Warren,O. V4
.120	1 7/16x1 11/16	Warren,O. V4
.120	1½x2	Warren,O. V4
.120	1½x3	Warren,O. V4
.120	1⅝x3	Warren,O. V4
.120	2x2⅛ to 2½x3¾	OilCity,Pa. J5
.120	2x3	Warren,O. V4
.134	1x2	Warren,O. V4
.134	1x2¼	Warren,O. V4
.134	1x2½	Warren,O. V4
.134	1¼x2	Warren,O. V4
.134	1 7/16x1 11/16	Warren,O. V4
.134	1½x2	Warren,O. V4
.134	1½x3	Warren,O. V4
.134	1⅝x3	Warren,O. V4
.134	2x2⅛ to 2½x3¾	OilCity,Pa. J5
.134	2x3	Warren,O. V4

Republic Steel Corp.'s Steel & Tubes Division also produces this product at Brooklyn, N. Y., Ferndale, Mich., and Cleveland.

Round—Seamless, Hot-Finished

.095–1¼	1¾–7	Shelby,O. O2
.109–2.571	2–14.375	Allenport, Pa. P7
.134–.280	1½–6⅝	Milwaukee G3
.134–.938	2⅜–14	Ambridge,Pa. N2
.154–.436	2⅜	Youngstown Y1
.154–.552	2⅞	Youngstown Y1
.156	2⅜	Aliquippa,Pa. J5
.165	2⅜	Aliquippa,Pa. J5
.180	2⅜	Aliquippa,Pa. J5
.187–.600	3½	Youngstown Y1
.187–.636	4	Youngstown Y1
.187–.674	4½	Youngstown Y1
.187–.710	5	Youngstown Y1
.187–.750	5½	Youngstown Y1
.187–.750	5 5/8	Youngstown Y1
.188	2⅜–6⅝	Aliquippa,Pa. J5
.203	2⅜–6⅝	Aliquippa,Pa. J5
.218–.864	6⅝	Youngstown Y1
.218–.864	7	Youngstown Y1
.218–.864	7⅝	Youngstown Y1
.218–.875	8⅝	Youngstown Y1
.220	2⅜–8⅝	Aliquippa,Pa. J5
.238	2⅜–8⅝	Aliquippa,Pa. J5
.250	2⅜–10¾	Aliquippa,Pa. J5
.250–.875	9⅝	Youngstown Y1
.250–.875	10¾	Youngstown Y1
.281	2⅜–10¾	Aliquippa,Pa. J5
.313	2⅜–12¾	Aliquippa,Pa. J5
.375	2⅜–14	Aliquippa,Pa. J5
.438	2⅜–14	Aliquippa,Pa. J5
.500 and hvr.	3–10½	Canton,O. T2
.563	3½–14	Aliquippa,Pa. J5
.625	4–14	Aliquippa,Pa. J5
.750	5½–14	Aliquippa,Pa. J5
.875	7⅝–14	Aliquippa,Pa. J5

MECHANICAL TUBING

(Code number following mill point indicates producing company, key on page 38)

○ Round—Welded, Cold-Rolled

Wall Thickness (inches)	Outside Dimensions (inches)	Mill Point, Producer
.010–.083	.065–1	Springfield,O. A2
.020–.120	½–2½	Orwell,O. B9
.020–.125	½–4	Farrell,Pa. B9
.026–.120	¼–1⅜	Adrian,Mich. S2
.028	⅜	Warren,O. V4
.028	.665	Warren,O. V4
.028	½	Warren,O. V4
.028	⅝	Warren,O. V4
.028	¾	Warren,O. V4
.028	⅞	Warren,O. V4
.028	1	Warren,O. V4
.028	1⅛	Warren,O. V4
.028	1¼	Warren,O. V4
.028	1⅜	Warren,O. V4
.028	1½	Warren,O. V4
.028	1⅝	Warren,O. V4
.028	1¾	Warren,O. V4
.028	1.335	Warren,O. V4
.028	1⅞	Warren,O. V4
.028	1.400	Warren,O. V4
.028	1½	Warren,O. V4
.028	1.555	Warren,O. V4
.028	1⅝	Warren,O. V4
.028	⅜–1⅝	Evanston,Ill. M15
.028	⅜–1⅝	OilCity,Pa. J5
.028	⅜–3	Sharon,Pa. S21
.028	⅜–4	Toledo,O. T8
.028–.049	⅜–⅞	Detroit B13
.028–.049	⅜	Brooklyn,N.Y. R2
.028–.049	½	Ferndale,Mich. R2
.028–.049	½	Wheatland,Pa. W9
.028–.065	½	Brooklyn,N.Y. R2
.028–.065	⅝	Ferndale,Mich. R2
.028–.065	⅝	Wheatland,Pa. W9
.028–.083	⅝	Cleveland R2
.028–.083	⅝–3	Piqua,O. A10
.028–.083	½	Cleveland R2
.028–.083	¾	Ferndale,Mich. R2
.028–.083	¾	Wheatland,Pa. W9
.028–.083	⅞	Ferndale,Mich. R2
.028–.083	⅞	Wheatland,Pa. W9
.028–.083	1	Ferndale,Mich. R2
.028–.083	1⅛	Ferndale,Mich. R2
.028–.095	⅝	Brooklyn,N.Y. R2
.028–.095	⅝	Cleveland R2
.028–.095	¾	Brooklyn,N.Y. R2
.028–.095	¾	Cleveland R2
.028–.095	⅞	Brooklyn,N.Y. R2
.028–.095	⅞	Cleveland R2
.028–.095	1	Wheatland,Pa. W9
.028–.095	1⅛	Wheatland,Pa. W9
.028–.095	1¼	Wheatland,Pa. W9
.028–.095	1⅜	Wheatland,Pa. W9
.028–.120	⅜–3	Shelby,O. O2
.028–.120	1	Brooklyn,N.Y. R2
.028–.120	1	Cleveland R2
.028–.120	1⅛	Brooklyn,N.Y. R2
.028–.120	1⅛	Cleveland R2
.028–.120	1¼	Brooklyn,N.Y. R2
.028–.120	1¼	Cleveland R2
.028–.120	1¼	Ferndale,Mich. R2
.028–.120	1⅜	Brooklyn,N.Y. R2
.028–.120	1⅜	Cleveland R2
.028–.120	1⅜	Ferndale,Mich. R2
.032	½–3	Sharon,Pa. S21
.035	⅜–2	Evanston,Ill. M15
.035	½	Warren,O. V4
.035	½–2¼	OilCity,Pa. J5
.035	½–3	Sharon,Pa. S21
.035	⅝	Warren,O. V4
.035	.665	Warren,O. V4
.035	¾	Warren,O. V4
.035	¾	Warren,O. V4
.035	¾	Warren,O. V4
.035	⅞	Warren,O. V4
.035	1	Warren,O. V4
.035	1⅛	Warren,O. V4
.035	1¼	Warren,O. V4
.035	1⅜	Warren,O. V4
.035	1½	Warren,O. V4
.035	1⅝	Warren,O. V4
.035	1¾	Warren,O. V4
.035	1.335	Warren,O. V4
.035	1.355	Warren,O. V4
.035	1⅞	Warren,O. V4
.035	1.400	Warren,O. V4
.035	1½	Warren,O. V4
.035	1.555	Warren,O. V4
.035	1⅝	Warren,O. V4
.035	1¾	Warren,O. V4
.035	1.670	Warren,O. V4
.035	1¾	Warren,O. V4
.035	1¾	Warren,O. V4
.035	1.786	Warren,O. V4
.035	1⅞	Warren,O. V4
.035	1.9	Warren,O. V4
.035	1⅞	Warren,O. V4
.035	2	Warren,O. V4
.035	2⅛	Warren,O. V4
.035	2⅛	Warren,O. V4
.035	2⅛	Warren,O. V4
.035	2.205	Warren,O. V4
.035	2¼	Warren,O. V4
.035	2.343	Warren,O. V4
.035	2⅜	Warren,O. V4
.035	2⅜	Warren,O. V4
.035	2⅜	Warren,O. V4
.035	2.405	Warren,O. V4
.035	2½	Warren,O. V4
.035	2½	Warren,O. V4
.035	2½	Warren,O. V4
.035	2.465	Warren,O. V4
.035	2½	Warren,O. V4
.035	2.500	Warren,O. V4
.035	2⅝	Warren,O. V4
.035	2⅝	Warren,O. V4
.035	2⅝	Warren,O. V4
.035	2.625	Warren,O. V4
.035	2⅝	Warren,O. V4
.035	2.670	Warren,O. V4
.035	2¾	Warren,O. V4
.035	2¾	Warren,O. V4
.035	2¾	Warren,O. V4
.035	2.750	Warren,O. V4
.035	2¾	Warren,O. V4
.035	2.795	Warren,O. V4
.035	2⅞	Warren,O. V4
.035	2⅞	Warren,O. V4
.035	2⅞	Warren,O. V4
.035	2.875	Warren,O. V4
.035	2⅞	Warren,O. V4
.035	2.900	Warren,O. V4
.035	2.906	Warren,O. V4
.035	2.910	Warren,O. V4
.035	2.920	Warren,O. V4
.035	2.930	Warren,O. V4
.035	2.937	Warren,O. V4
.035	2.945	Warren,O. V4
.035	2.950	Warren,O. V4
.035	2.960	Warren,O. V4
.035	2.970	Warren,O. V4
.035	2.980	Warren,O. V4
.035	2.990	Warren,O. V4
.035	3	Warren,O. V4
.035	3.000	Warren,O. V4
.035	3.010	Warren,O. V4
.035	3.020	Warren,O. V4
.035	3.030	Warren,O. V4
.035	3.040	Warren,O. V4
.035	3.050	Warren,O. V4
.035	3.060	Warren,O. V4
.035	3.070	Warren,O. V4
.035	3.080	Warren,O. V4
.035	3.090	Warren,O. V4
.035	3.100	Warren,O. V4
.035	3.110	Warren,O. V4
.035	3.120	Warren,O. V4
.035	3.130	Warren,O. V4
.035	3.140	Warren,O. V4
.035	3.150	Warren,O. V4
.035	3.160	Warren,O. V4
.035	3.170	Warren,O. V4
.035	3.180	Warren,O. V4
.035	3.190	Warren,O. V4
.035	3.200	Warren,O. V4
.035	3.210	Warren,O. V4
.035	3.220	Warren,O. V4
.035	3.230	Warren,O. V4
.035	3.240	Warren,O. V4
.035	3.250	Warren,O. V4
.035	3.260	Warren,O. V4
.035	3.270	Warren,O. V4
.035	3.280	Warren,O. V4
.035	3.290	Warren,O. V4
.035	3.300	Warren,O. V4
.035	3.310	Warren,O. V4
.035	3.320	Warren,O. V4
.035	3.330	Warren,O. V4
.035	3.340	Warren,O. V4
.035	3.350	Warren,O. V4
.035	3.360	Warren,O. V4
.035	3.370	Warren,O. V4
.035	3.380	Warren,O. V4
.035	3.390	Warren,O. V4
.035	3.400	Warren,O. V4
.035	3.410	Warren,O. V4
.035	3.420	Warren,O. V4
.035	3.430	Warren,O. V4
.035	3.440	Warren,O. V4
.035	3.450	Warren,O. V4
.035	3.460	Warren,O. V4
.035	3.470	Warren,O. V4
.035	3.480	Warren,O. V4
.035	3.490	Warren,O. V4
.035	3.500	Warren,O. V4
.035	3.510	Warren,O. V4
.035	3.520	Warren,O. V4
.035	3.530	Warren,O. V4
.035	3.540	Warren,O. V4
.035	3.550	Warren,O. V4
.035	3.560	Warren,O. V4
.035	3.570	Warren,O. V4
.035	3.580	Warren,O. V4
.035	3.590	Warren,O. V4
.035	3.600	Warren,O. V4
.035	3.610	Warren,O. V4
.035	3.620	Warren,O. V4
.035	3.630	Warren,O. V4
.035	3.640	Warren,O. V4
.035	3.650	Warren,O. V4
.035	3.660	Warren,O. V4
.035	3.670	Warren,O. V4
.035	3.680	Warren,O. V4
.035	3.690	Warren,O. V4
.035	3.700	Warren,O. V4
.035	3.710	Warren,O. V4
.035	3.720	Warren,O. V4
.035	3.730	Warren,O. V4
.035	3.740	Warren,O. V4
.035	3.750	Warren,O. V4
.035	3.760	Warren,O. V4
.035	3.770	Warren,O. V4
.035	3.780	Warren,O. V4
.035	3.790	Warren,O. V4
.035	3.800	Warren,O. V4
.035	3.810	Warren,O. V4
.035	3.820	Warren,O. V4
.035	3.830	Warren,O. V4
.035	3.840	Warren,O. V4
.035	3.850	Warren,O. V4
.035	3.860	Warren,O. V4
.035	3.870	Warren,O. V4
.035	3.880	Warren,O. V4
.035	3.890	Warren,O. V4
.035	3.900	Warren,O. V4
.035	3.910	Warren,O. V4
.035	3.920	Warren,O. V4
.035	3.930	Warren,O. V4
.035	3.940	Warren,O. V4
.035	3.950	Warren,O. V4
.035	3.960	Warren,O. V4
.035	3.970	Warren,O. V4
.035	3.980	Warren,O. V4
.035	3.990	Warren,O. V4
.035	4	Warren,O. V4
.035	4.000	Warren,O. V4
.035	4.010	Warren,O. V4
.035	4.020	Warren,O. V4
.035	4.030	Warren,O. V4
.035	4.040	Warren,O. V4
.035	4.050	Warren,O. V4
.035	4.060	Warren,O. V4
.035	4.070	Warren,O. V4
.035	4.080	Warren,O. V4
.035	4.090	Warren,O. V4
.035	4.100	Warren,O. V4
.035	4.110	Warren,O. V4
.035	4.120	Warren,O. V4
.035	4.130	Warren,O. V4
.035	4.140	Warren,O. V4
.035	4.150	Warren,O. V4
.035	4.160	Warren,O. V4
.035	4.170	Warren,O. V4
.035	4.180	Warren,O. V4
.035	4.190	Warren,O. V4
.035	4.200	Warren,O. V4
.035	4.210	Warren,O. V4
.035	4.220	Warren,O. V4
.035	4.230	Warren,O. V4
.035	4.240	Warren,O. V4
.035	4.250	Warren,O. V4
.035	4.260	Warren,O. V4
.035	4.270	Warren,O. V4
.035	4.280	Warren,O. V4
.035	4.290	Warren,O. V4
.035	4.300	Warren,O. V4
.035	4.310	Warren,O. V4
.035	4.320	Warren,O. V4
.035	4.330	Warren,O. V4
.035	4.340	Warren,O. V4
.035	4.350	Warren,O. V4
.035	4.360	Warren,O. V4
.035	4.370	Warren,O. V4
.035	4.380	Warren,O. V4
.035	4.390	Warren,O. V4
.035	4.400	Warren,O. V4
.035	4.410	Warren,O. V4
.035	4.420	Warren,O. V4
.035	4.430	Warren,O. V4
.035	4.440	Warren,O. V4
.035	4.450	Warren,O. V4
.035	4.460	Warren,O. V4
.035	4.470	Warren,O. V4
.035	4.480	Warren,O. V4
.035	4.490	Warren,O. V4
.035	4.500	Warren,O. V4
.035	4.510	Warren,O. V4
.035	4.520	Warren,O. V4
.035	4.530	Warren,O. V4
.035	4.540	Warren,O. V4
.035	4.550	Warren,O. V4
.035	4.560	Warren,O. V4
.035	4.570	Warren,O. V4
.035	4.580	Warren,O. V4
.035	4.590	Warren,O. V4
.035	4.600	Warren,O. V4
.035	4.610	Warren,O. V4
.035	4.620	Warren,O. V4
.035	4.630	Warren,O. V4
.035	4.640	Warren,O. V4
.035	4.650	Warren,O. V4
.035	4.660	Warren,O. V4
.035	4.670	Warren,O. V4
.035	4.680	Warren,O. V4
.035	4.690	Warren,O. V4
.035	4.700	Warren,O. V4
.035	4.710	Warren,O. V4
.035	4.720	Warren,O. V4
.035	4.730	Warren,O. V4
.035	4.740	Warren,O. V4
.035	4.750	Warren,O. V4
.035	4.760	Warren,O. V4
.035	4.770	Warren,O. V4
.035	4.780	Warren,O. V4
.035	4.790	Warren,O. V4
.035	4.800	Warren,O. V4
.035	4.810	Warren,O. V4
.035	4.820	Warren,O. V4
.035	4.830	Warren,O. V4
.035	4.840	Warren,O. V4
.035	4.850	Warren,O. V4
.035	4.860	Warren,O. V4
.035	4.870	Warren,O. V4
.035	4.880	Warren,O. V4
.035	4.890	Warren,O. V4
.035	4.900	Warren,O. V4
.035	4.910	Warren,O. V4
.035	4.920	Warren,O. V4
.035	4.930	Warren,O. V4
.035	4.940	Warren,O. V4
.035	4.950	Warren,O. V4
.035	4.960	Warren,O. V4
.035	4.970	Warren,O. V4
.035	4.980	Warren,O. V4
.035	4.990	Warren,O. V4
.035	5	Warren,O. V4
.035–.049	½–3	Sharon,Pa. S21
.035–.049	⅝–2	Evanston,Ill. M15
.035–.049	½	Warren,O. V4
.035–.049	½–3	Sharon,Pa. S21
.035–.049	½–4	OilCity,Pa. J5
.035–.049	⅝	Warren,O. V4
.035–.049	.665	Warren,O. V4
.035–.049	¾	Warren,O. V4
.035–.049	⅞	Warren,O. V4
.035–.049	1	Warren,O. V4
.035–.049	1⅛	Warren,O. V4
.035–.049	1¼	Warren,O. V4
.035–.049	1⅜	Warren,O. V4
.035–.049	1½	Warren,O. V4
.035–.049	1⅝	Warren,O. V4
.035–.049	1¾	Warren,O. V4
.035–.049	1.335	Warren,O. V4
.035–.049	1.355	Warren,O. V4
.035–.049	1⅞	Warren,O. V4
.035–.049	1.400	Warren,O. V4
.035–.049	1½	Warren,O. V4
.035–.049	1.555	Warren,O. V4
.035–.049	1⅝	Warren,O. V4
.035–.049	1¾	Warren,O. V4
.035–.049	1.670	Warren,O. V4
.035–.049	1¾	Warren,O. V4
.035–.049	1¾	Warren,O. V4
.035–.049	1.786	Warren,O. V4
.035–.049	1⅞	Warren,O. V4
.035–.049	1.9	Warren,O. V4
.035–.049	1⅞	Warren,O. V4
.035–.049	2	Warren,O. V4
.035–.049	2⅛	Warren,O. V4
.035–.049	2⅛	Warren,O. V4
.035–.049	2⅛	Warren,O. V4
.035–.049	2.205	Warren,O. V4
.035–.049	2¼	Warren,O. V4
.035–.049	2.343	Warren,O. V4
.035–.049	2⅜	Warren,O. V4
.035–.049	2⅜	Warren,O. V4
.035–.049	2⅜	Warren,O. V4
.035–.049	2.405	Warren,O. V4
.035–.049	2½	Warren,O. V4
.035–.049	2½	Warren,O. V4
.035–.049	2½	Warren,O. V4
.035–.049	2.465	Warren,O. V4
.035–.049	2½	Warren,O. V4
.035–.049	2.500	Warren,O. V4
.035–.049	2⅝	Warren,O. V4
.035–.049	2⅝	Warren,O. V4
.035–.049	2⅝	Warren,O. V4
.035–.049	2.625	Warren,O. V4
.035–.049	2⅝	Warren,O. V4
.035–.049	2.670	Warren,O. V4
.035–.049	2¾	Warren,O. V4
.035–.049	2¾	Warren,O. V4
.035–.049	2¾	Warren,O. V4
.035–.049	2.750	Warren,O. V4
.035–.049	2¾	Warren,O. V4
.035–.049	2.795	Warren,O. V4
.035–.049	2⅞	Warren,O. V4
.035–.049	2⅞	Warren,O. V4
.035–.049	2⅞	Warren,O. V4
.035–.049	2.875	Warren,O. V4
.035–.049	2⅞	Warren,O. V4
.035–.049	2.900	Warren,O. V4
.035–.049	2.906	Warren,O. V4
.035–.049	2.910	Warren,O. V4
.035–.049	2.920	Warren,O. V4
.035–.049	2.930	Warren,O. V4
.035–.049	2.937	Warren,O. V4
.035–.049	2.945	Warren,O. V4
.035–.049	2.950	Warren,O. V4
.035–.049	2.960	Warren,O. V4
.035–.049	2.970	Warren,O. V4
.035–.049	2.980	Warren,O. V4
.035–.049	2.990	Warren,O. V4
.035–.049	3	Warren,O. V4
.035–.049	3.000	Warren,O. V4
.035–.049	3.010	Warren,O. V4
.035–.049	3.020	Warren,O. V4
.035–.049	3.030	Warren,O. V4
.035–.049	3.040	Warren,O. V4
.035–.049	3.050	Warren,O. V4
.035–.049	3.060	Warren,O. V4
.035–.049	3.070	Warren,O. V4
.035–.049	3.080	Warren,O. V4
.035–.049	3.090	Warren,O. V4
.035–.049	3.100	Warren,O. V4
.035–.049	3.110	Warren,O. V4
.035–.049	3.120	Warren,O. V4
.035–.049	3.130	Warren,O. V4
.035–.049	3.140	Warren,O. V4
.035–.049	3.150	Warren,O. V4
.035–.049	3.160	Warren,O. V4
.035–.049	3.170	Warren,O. V4
.035–.049	3.180	Warren,O. V4
.035–.049	3.190	Warren,O. V4
.035–.049	3.200	Warren,O. V4
.035–.049	3.210	Warren,O. V4
.035–.049	3.220	Warren,O. V4
.035–.049	3.230	Warren,O. V4
.035–.049	3.240	Warren,O. V4
.035–.049	3.250	Warren,O. V4
.035–.049	3.260	Warren,O. V4
.035–.049	3.270	Warren,O. V4
.035–.049	3.280	Warren,O. V4
.035–.049	3.290	Warren,O. V4
.035–.049	3.300	Warren,O. V4
.035–.049	3.310	Warren,O. V4
.035–.049	3.320	Warren,O. V4
.035–.049	3.330	Warren,O. V4
.035–.049	3.340	Warren,O. V4
.035–.049	3.350	Warren,O. V4
.035–.049	3.360	Warren,O. V4
.035–.049	3.370	Warren,O. V4
.035–.049	3.380	Warren,O. V4
.035–.049	3.390	Warren,O. V4
.035–.049	3.400	Warren,O. V4
.035–.049	3.410	Warren,O. V4
.035–.049	3.420	Warren,O. V4
.035–.049	3.430	Warren,O. V4
.035–.049	3.440	Warren,O. V4
.035–.049	3.450	Warren,O. V4
.035–.049	3.460	Warren,O. V4
.035–.049	3.470	Warren,O. V4
.035–.049	3.480	Warren,O. V4
.035–.049	3.490	Warren,O. V4
.035–.049	3.500	Warren,O. V4
.035–.049	3.510	Warren,O. V4
.035–.049	3.520	Warren,O. V4
.035–.049	3.530	Warren,O. V4
.035–.049	3.540	Warren,O. V4
.035–.049	3.550	Warren,O. V4
.035–.049	3.560	Warren,O. V4
.035–.049	3.570	Warren,O. V4
.035–.049	3.580	Warren,O. V4
.035–.049	3.590	Warren,O. V4
.035–.049	3.600	Warren,O. V4
.035–.049	3.610	Warren,O. V4
.035–.049	3.620	Warren,O. V4
.035–.049	3.630	Warren,O. V4
.035–.049	3.640	Warren,O. V4
.035–.049	3.650	Warren,O. V4
.035–.049	3.660	Warren,O. V4
.035–.049	3.670	Warren,O. V4
.035–.049	3.680	Warren,O. V4
.035–.049	3.690	Warren,O. V4
.035–.049	3.700	Warren,O. V4
.035–.049	3.710	Warren,O. V4
.035–.049	3.720	Warren,O. V4
.035–.049	3.730	Warren,O. V4
.035–.049	3.740	Warren,O. V4
.035–.049	3.750	Warren,O. V4
.035–.049	3.760	Warren,O. V4
.035–.049	3.770	Warren,O. V4
.035–.049	3.780	Warren,O. V4
.035–.049	3.790	Warren,O. V4
.035–.049	3.800	Warren,O. V4
.035–.049	3.810	Warren,O. V4
.035–.049	3.820	Warren,O. V4
.035–.049	3.830	Warren,O. V4
.035–.049	3.840	Warren,O. V4
.035–.049	3.850	Warren,O. V4
.035–.049	3.860	Warren,O. V4
.035–.049	3.870	Warren,O. V4
.035–.049	3.880	Warren,O. V4
.035–.049	3.890	Warren,O. V4
.035–.049	3.900	Warren,O. V4
.035–.049	3.910	Warren,O. V4
.035–.049	3.920	Warren,O. V4
.035–.049	3.930	Warren,O. V4
.035–.049	3.940	Warren,O. V4
.035–.049	3.950	Warren,O. V4
.035–.049	3.960	Warren,O. V4
.035–.049	3.970	Warren,O. V4
.035–.049	3.980	Warren,O. V4
.035–.049	3.990	Warren,O. V4
.035–.049	4	Warren,O. V4
.035–.049	4.000	Warren,O. V4
.035–.049	4.010	Warren,O. V4
.035–.049	4.020	Warren,O. V4
.035–.049	4.030	Warren,O. V4
.035–.049	4.040	Warren,O. V4
.035–.049	4.050	Warren,O. V4
.035–.049	4.060	Warren,O. V4
.035–.049	4.070	Warren,O. V4
.035–.049	4.080	Warren,O. V4
.035–.049	4.090	Warren,O. V4
.035–.049	4.100	Warren,O. V4
.035–.049	4.110	Warren,O. V4
.035–.049	4.120	Warren,O. V4
.035–.049	4.130	Warren,O. V4
.035–.049	4.140	Warren,O. V4
.035–.049	4.150	Warren,O. V4
.035–.049	4.160	Warren,O. V4
.035–.049	4.170	Warren,O. V4
.035–.049	4.180	Warren,O. V4
.035–.049	4.190	Warren,O. V4
.035–.049	4.200	Warren,O. V4
.035–.049	4.210	Warren,O. V4
.035–.049	4.220	Warren,O. V4
.035–.049	4.230	Warren,O. V4
.035–.049	4.240	Warren,O. V4
.035–.049	4.250	Warren,O. V4
.035–.049	4.260	Warren,O. V4
.035–.049	4.270	Warren,O. V4
.035–.049	4.280	Warren,O. V4
.035–.049	4.290	Warren,O. V4
.035–.049	4.300	Warren,O. V4
.035–.049	4.310	Warren,O. V4
.035–.049	4.320	Warren,O. V4
.035–.049	4.330	Warren,O. V4
.035–.049	4.340	Warren,O. V4
.035–.049	4.350	Warren,O. V4
.035–.049	4.360	Warren,O. V4
.035–.049	4.370	Warren,O. V4
.035–.049	4.380	Warren,O. V4
.035–.049	4.390	Warren,O. V4
.035–.049	4.400	Warren,O. V4
.035–.049	4.410	Warren,O. V4
.035–.049	4.420	Warren,O. V4
.035–.049	4.430	Warren,O. V4
.035–.049	4.440	Warren,O. V4
.035–.049	4.450	Warren,O. V4
.035–.049	4.460	Warren,O. V4
.035–.049	4.470	Warren,O. V4
.035–.049	4.480	Warren,O. V4
.035–.049	4.490	Warren,O. V4
.035–.049	4.500	Warren,O. V4
.035–.049	4.510	Warren,O. V4
.035–.049	4.520	Warren,O. V4
.035–.049	4.530	Warren,O. V4
.035–.049	4.540	Warren,O. V4
.035–.049	4.550	Warren,O. V4
.035–.049	4.560	Warren,O. V4
.035–.049	4.570	Warren,O. V4
.035–.049	4.580	Warren,O. V4
.035–.049	4.590	Warren,O. V4
.035–.049	4.600	Warren,O. V4
.035–.049	4.610	Warren,O. V4
.035–.049	4.620	Warren,O. V4
.035–.049	4.630	Warren,O. V4
.035–.049	4.640	Warren,O. V4
.035–.049	4.650	Warren,O. V4
.035–.049	4.660	Warren,O. V4
.035–.049	4.670	Warren,O. V4
.035–.049	4.680	Warren,O. V4
.035–.049	4.690	Warren,O. V4
.035–.049	4.700	Warren,O. V4
.035–.049	4.710	Warren,O. V4
.035–.049	4.720	Warren,O. V4
.035–.049	4.730	Warren,O. V4
.035–.049	4.740	Warren,O. V4
.035–.049	4.750	Warren,O. V4
.035–.049	4.760	Warren,O. V4
.035–.049	4.770	Warren,O. V4
.035–.049	4.780	Warren,O. V4
.035–.049	4.790	Warren,O. V4
.035–.049	4.800	Warren,O. V4
.035–.049	4.810	Warren,O. V4
.035–.049	4.820	Warren,O. V4
.035–.049	4.830	Warren,O. V4
.035–.049	4.840	Warren,O. V4
.035–.049	4.850	Warren,O. V4
.035–.049	4.860	Warren,O. V4
.035–.049	4.870	Warren,O. V4
.035–.049	4.880	Warren,O. V4
.035–.049	4.890	Warren,O. V4
.035–.049	4.900	Warren,O. V4
.035–.049	4.910	Warren,O. V4
.035–.049	4.920	Warren,O. V4
.035–.049	4.930	Warren,O. V4
.035–.049	4.940	Warren,O. V4
.035–.049	4.950	Warren,O. V4
.035–.049	4.960	Warren,O. V4
.035–.049	4.970	Warren,O. V4
.035–.049	4.980	Warren,O. V4
.035–.049	4.990	Warren,O. V4
.035–.049	5	Warren,O. V4
.035–.049	5.000	Warren,O. V4
.035–.049	5.010	Warren,O. V4
.035–.049	5.020	Warren,O. V4
.035–.049	5.030	Warren,O. V4
.035–.049	5.040	Warren,O. V4
.035–.049	5.050	Warren,O. V4
.035–.049	5.060	Warren,O. V4
.035–.049	5.070	Warren,O. V4
.035–.049	5.080	Warren,O. V4
.035–.049	5.090	Warren,O. V4
.035–.049	5.100	Warren,O. V4
.035–.049	5.110	Warren,O. V4
.035–.049	5.120	Warren,O. V4
.035–.049	5.130	Warren,O. V4
.035–.049	5.140	Warren,O. V4
.035–.049	5.150	Warren,O. V4
.035–.049	5.160	Warren,O. V4
.035–.049	5.170	Warren,O. V4
.035–.049	5.180	Warren,O. V4
.035–.049	5.190	Warren,O. V4
.035–.049	5.200	Warren,O. V4
.035–.049	5.210	Warren,O. V4
.035–.049	5.220	Warren,O. V4
.035–.049	5.230	Warren,O. V4
.035–.049	5.240	Warren,O. V4
.035–.049	5.250	Warren,O. V4
.035–.049	5.260	Warren,O. V4
.035–.049	5.270	Warren,O. V4
.035–.049	5.280	Warren,O. V4
.035–.049	5.290	Warren,O. V4
.035–.049	5.300	Warren,O. V4
.035–.049	5.310	Warren,O. V4
.035–.049	5.320	Warren,O. V4
.035–.049	5.330	Warren,O. V4
.035–.049	5.340	Warren,O. V4
.035–.049	5.350	Warren,O. V4
.035–.049	5.360	Warren,O. V4
.035–.049	5.370	Warren,O. V4
.035–.049	5.380	Warren,O. V4
.035–.049	5.390

(Code number following mill point indicates producing company, key on page 38)

Round—Welded, Cold-Rolled

CONTINUED FROM PRECEDING PAGE

Wall Thickness (inches)	Outside Dimensions (inches)	Mill Point, Producer
.083	⅝–2	Evanston,Ill. M15
.083	⅝	Warren,O. V4
.083	⅝–3	Sharon,Pa. S21
.083	.665	Warren,O. V4
.083	¾	Warren,O. V4
.083	⅞	Warren,O. V4
.083	⅞–4	OilCity,Pa. J5
.083	⅞	Warren,O. V4
.083	1	Warren,O. V4
.083	1	Warren,O. V4
.083	1⅛	Warren,O. V4
.083	1⅛	Warren,O. V4
.083	1¼	Warren,O. V4
.083	1¼	Warren,O. V4
.083	1⅜	Warren,O. V4
.083	1⅜	Warren,O. V4
.083	1½	Warren,O. V4
.083	1⅝	Warren,O. V4
.083	1.335	Warren,O. V4
.083	1.355	Warren,O. V4
.083	1⅝	Warren,O. V4
.083	1.400	Warren,O. V4
.083	1½	Warren,O. V4
.083	1.555	Warren,O. V4
.083	1⅝	Warren,O. V4
.083	1⅝	Warren,O. V4
.083	1.670	Warren,O. V4
.083	1¾	Warren,O. V4
.083	1¾	Warren,O. V4
.083	1.786	Warren,O. V4
.083	1⅞	Warren,O. V4
.083	1.9	Warren,O. V4
.083	1⅞	Warren,O. V4
.083	2	Warren,O. V4
.083	2⅛	Warren,O. V4
.083	2⅛	Warren,O. V4
.083	2⅛	Warren,O. V4
.083	2.205	Warren,O. V4
.083	2¼	Warren,O. V4
.083	2.343	Warren,O. V4
.083	2⅜	Warren,O. V4
.083	2½	Warren,O. V4
.083	2⅝	Warren,O. V4
.083	2⅝	Warren,O. V4
.083	2¾	Warren,O. V4
.083	2.905	Warren,O. V4
.083	2⅞	Warren,O. V4
.083	2⅞	Warren,O. V4
.083	3	Warren,O. V4
.083	3⅛	Warren,O. V4
.083	3¼	Warren,O. V4
.083	3⅜	Warren,O. V4
.095 min.	½–⅝	Monaca,Pa. P9
.095	¾	Warren,O. V4
.095	⅞	Warren,O. V4
.095	⅞–3	Sharon,Pa. S21
.095	⅞	Warren,O. V4
.095	⅞–2	Evanston,Ill. M15
.095	1	Warren,O. V4
.095	1	Warren,O. V4
.095	1–4	OilCity,Pa. J5
.095	1⅛	Warren,O. V4
.095	1⅛	Warren,O. V4
.095	1¼	Warren,O. V4
.095	1⅜	Warren,O. V4
.095	1¼	Warren,O. V4
.095	1⅜	Warren,O. V4
.095	1.335	Warren,O. V4
.095	1.355	Warren,O. V4
.095	1⅝	Warren,O. V4
.095	1.400	Warren,O. V4
.095	1½	Warren,O. V4
.095	1.555	Warren,O. V4
.095	1⅝	Warren,O. V4
.095	1⅝	Warren,O. V4

Wall Thickness (inches)	Outside Dimensions (inches)	Mill Point, Producer
.095	1.670	Warren,O. V4
.095	1¾	Warren,O. V4
.095	1¾	Warren,O. V4
.095	1.786	Warren,O. V4
.095	1⅞	Warren,O. V4
.095	1.9	Warren,O. V4
.095	1⅞	Warren,O. V4
.095	2	Warren,O. V4
.095	2	Warren,O. V4
.095	2⅛	Warren,O. V4
.095	2⅛	Warren,O. V4
.095	2⅛	Warren,O. V4
.095	2.205	Warren,O. V4
.095	2¼	Warren,O. V4
.095	2.343	Warren,O. V4
.095	2⅜	Warren,O. V4
.095	2½	Warren,O. V4
.095	2⅝	Warren,O. V4
.095	2⅝	Warren,O. V4
.095	2¾	Warren,O. V4
.095	2.905	Warren,O. V4
.095	2⅞	Warren,O. V4
.095	2⅞	Warren,O. V4
.095	3	Warren,O. V4
.095	3⅛	Warren,O. V4
.095	3¼	Warren,O. V4
.095	3⅜	Warren,O. V4
.109	⅝–3	Sharon,Pa. S21
.109	⅞	Warren,O. V4
.109	1	Warren,O. V4
.109	1–4	OilCity,Pa. J5
.109	1⅛	Warren,O. V4
.109	1⅛	Warren,O. V4
.109	1¼	Warren,O. V4
.109	1⅜	Warren,O. V4
.109	1⅜	Warren,O. V4
.109	1½	Warren,O. V4
.109	1¼	Warren,O. V4
.109	1⅝	Warren,O. V4
.109	1.335	Warren,O. V4
.109	1.355	Warren,O. V4
.109	1⅝	Warren,O. V4
.109	1.400	Warren,O. V4
.109	1½	Warren,O. V4
.109	1.555	Warren,O. V4
.109	1⅝	Warren,O. V4
.109	1⅝	Warren,O. V4
.109	1.670	Warren,O. V4
.109	1¾	Warren,O. V4
.109	1¾	Warren,O. V4
.109	1.786	Warren,O. V4
.109	1⅞	Warren,O. V4
.109	1.9	Warren,O. V4
.109	1⅞	Warren,O. V4
.109	2	Warren,O. V4
.109	2⅛	Warren,O. V4
.109	2⅛	Warren,O. V4
.109	2⅛	Warren,O. V4
.109	2.205	Warren,O. V4
.109	2¼	Warren,O. V4
.109	2.343	Warren,O. V4
.109	2⅜	Warren,O. V4
.109	2½	Warren,O. V4
.109	2⅝	Warren,O. V4
.109	2⅝	Warren,O. V4
.109	2¾	Warren,O. V4
.109	2.905	Warren,O. V4
.109	2⅞	Warren,O. V4
.109	2⅞	Warren,O. V4
.109	3	Warren,O. V4
.109	3⅛	Warren,O. V4
.109	3⅛	Warren,O. V4
.109	3¼	Warren,O. V4
.109	3⅜	Warren,O. V4
.109–.134	⅝–⅜	Monaca,Pa. P9
.109–.156	¾–1⅛	Monaca,Pa. P9
.109–.250	1⅛–1½	Monaca,Pa. P9

Wall Thickness (inches)	Outside Dimensions (inches)	Mill Point, Producer
.120	1	Warren,O. V4
.120	1⅛	Warren,O. V4
.120	1⅛	Warren,O. V4
.120	1¼	Warren,O. V4
.120	1⅜	Warren,O. V4
.120	1⅜	Warren,O. V4
.120	1¼	Warren,O. V4
.120	1¼–3	Sharon,Pa. S21
.120	1⅜	Warren,O. V4
.120	1.335	Warren,O. V4
.120	1.355	Warren,O. V4
.120	1⅝	Warren,O. V4
.120	1.400	Warren,O. V4
.120	1½	Warren,O. V4
.120	1½–4	OilCity,Pa. J5
.120	1.555	Warren,O. V4
.120	1⅝	Warren,O. V4
.120	1⅝	Warren,O. V4
.120	1.670	Warren,O. V4
.120	1¾	Warren,O. V4
.120	1¾	Warren,O. V4
.120	1.786	Warren,O. V4
.120	1⅞	Warren,O. V4
.120	1.9	Warren,O. V4
.120	1⅞	Warren,O. V4
.120	2	Warren,O. V4
.120	2⅛	Warren,O. V4
.120	2⅛	Warren,O. V4
.120	2⅛	Warren,O. V4
.120	2.205	Warren,O. V4
.120	2¼	Warren,O. V4
.120	2.343	Warren,O. V4
.120	2⅜	Warren,O. V4
.120	2½	Warren,O. V4
.120	2⅝	Warren,O. V4
.120	2⅝	Warren,O. V4
.120	2¾	Warren,O. V4
.120	2.905	Warren,O. V4
.120	2⅞	Warren,O. V4
.120	2⅞	Warren,O. V4
.120	3	Warren,O. V4
.120	3⅛	Warren,O. V4
.120	3¼	Warren,O. V4
.120	3⅜	Warren,O. V4
.134	1¼–3	Sharon,Pa. S21
.134	1	Warren,O. V4
.134	1.670	Warren,O. V4
.134	1¾	Warren,O. V4
.134	1¾	Warren,O. V4
.134	1.786	Warren,O. V4
.134	1⅞	Warren,O. V4
.134	1.9	Warren,O. V4
.134	1⅞	Warren,O. V4
.134	2	Warren,O. V4
.134	2–4	OilCity,Pa. J5
.134	2⅛	Warren,O. V4
.134	2⅛	Warren,O. V4
.134	2⅛	Warren,O. V4
.134	2.205	Warren,O. V4
.134	2¼	Warren,O. V4
.134	2.343	Warren,O. V4
.134	2⅜	Warren,O. V4
.134	2½	Warren,O. V4
.134	2⅝	Warren,O. V4
.134	2⅝	Warren,O. V4
.134	2¾	Warren,O. V4
.134	2.905	Warren,O. V4
.134	2⅞	Warren,O. V4
.134	2⅞	Warren,O. V4
.134	3	Warren,O. V4
.134	3⅛	Warren,O. V4
.134	3¼	Warren,O. V4
.134	3¼	Warren,O. V4
.134	3⅜	Warren,O. V4
.148 min.	1½–2½	Monaca,Pa. P9

Rectangular—Welded, Cold-Rolled

.010–.065	¼x⅜ to ½x⅝	Springfield,O. A2
.028–.083	⅝x⅝ to 9 sq. in.	Piqua,O. A10
.035	⅞x1½	Warren,O. V4
.035	⅝x⅝	Warren,O. V4
.035	⅝x1	Warren,O. V4
.035	⅝x2⅝	Warren,O. V4
.035	½x⅝ to 1½x2	OilCity,Pa. J5
.035	½x1	Warren,O. V4
.035	½x1¼	Warren,O. V4
.035	½x1⅝	Warren,O. V4
.035	½x1½	Warren,O. V4
.035	⅝x1½	Warren,O. V4
.035	¾x1⅞	Warren,O. V4
.035	¾x1⅝	Warren,O. V4
.035	¾x1¼	Warren,O. V4
.035	¾x1½	Warren,O. V4
.035	¾x1⅝	Warren,O. V4
.035	1x1⅛	Warren,O. V4
.035	1x2½	Warren,O. V4
.035	1x1⅝	Warren,O. V4
.035	1x1½	Warren,O. V4
.035	1x2	Warren,O. V4
.035	1x2¼	Warren,O. V4
.035	1¼x2	Warren,O. V4
.035	1½x1⅝	Warren,O. V4
.035–.134	¼x⅝ to ⅜x2	LosAngeles P2
.049	½x⅝ to 1½x3½	OilCity,Pa. J5
.050	⅞x1½	Warren,O. V4
.050	⅝x⅝	Warren,O. V4
.050	⅝x1	Warren,O. V4
.050	⅝x2⅝	Warren,O. V4
.050	½x1	Warren,O. V4
.050	½x1¼	Warren,O. V4
.050	½x1⅝	Warren,O. V4
.050	½x1½	Warren,O. V4
.050	⅝x1½	Warren,O. V4
.050	¾x1½	Warren,O. V4
.050	¾x1⅝	Warren,O. V4
.050	¾x1⅞	Warren,O. V4
.050	1x1⅝	Warren,O. V4
.050	1x1¼	Warren,O. V4
.050	1x1½	Warren,O. V4
.050	1x2	Warren,O. V4
.050	1x2¼	Warren,O. V4
.050	1x2½	Warren,O. V4
.050	1¼x2	Warren,O. V4
.050	1½x1½	Warren,O. V4
.050	1½x2	Warren,O. V4
.050	1½x3	Warren,O. V4
.050	1¾x3	Warren,O. V4
.065	⅝x⅝	Warren,O. V4
.065	⅝x1	Warren,O. V4
.065	⅝x2⅝	Warren,O. V4

MECHANICAL TUBING

(Code number following mill point indicates producing company, key on page 38)

Rectangular—Welded, Cold-Rolled

CONTINUED FROM PRECEDING PAGE

Wall Thickness (inches)	Outside Dimensions (inches)	Mill Point, Producer
.065	½x⅝ to 2½x3¾	OilCity,Pa. J5
.065	½x1	Warren,O. V4
.065	½x1¼	Warren,O. V4
.065	½x1⅝	Warren,O. V4
.065	⅝x1½	Warren,O. V4
.065	⅝x1⅝	Warren,O. V4
.065	¾x1¼	Warren,O. V4
.065	¾x1⅝	Warren,O. V4
.065	¾x1¾	Warren,O. V4
.065	⅞x1½	Warren,O. V4
.065	⅞x1¾	Warren,O. V4
.065	1x1⅛	Warren,O. V4
.065	1x1¼	Warren,O. V4
.065	1x1⅜	Warren,O. V4
.065	1x1½	Warren,O. V4
.065	1x2	Warren,O. V4
.065	1x2½	Warren,O. V4
.065	1x2½	Warren,O. V4
.065	1¼x2	Warren,O. V4
.065	1¼x1¾	Warren,O. V4
.065	1½x2	Warren,O. V4
.065	1½x3	Warren,O. V4
.065	1⅝x3	Warren,O. V4
.065	2x3	Warren,O. V4
.083	½x1	Warren,O. V4
.083	⅝x1	Warren,O. V4
.083	⅝x1¼	Warren,O. V4
.083	⅝x1½	Warren,O. V4
.083	⅝x1⅝	Warren,O. V4
.083	¾x1½	Warren,O. V4
.083	¾x1¾	Warren,O. V4
.083	⅞x1½	Warren,O. V4
.083	⅞x1¾	Warren,O. V4
.083	¾x¾ to 2½x3¾	OilCity,Pa. J5
.083	¾x1¾	Warren,O. V4
.083	¾x1½	Warren,O. V4
.109	⅞x1¾	Warren,O. V4
.083	⅞x1⅞	Warren,O. V4
.083	1x1¼	Warren,O. V4
.083	1x1¼	Warren,O. V4
.083	1x1½	Warren,O. V4
.083	1x2	Warren,O. V4
.083	1x2⅛	Warren,O. V4
.083	1x2½	Warren,O. V4
.083	1¼x2	Warren,O. V4
.083	1¼x1¾	Warren,O. V4
.083	1½x2	Warren,O. V4
.083	1½x3	Warren,O. V4
.083	1⅝x3	Warren,O. V4
.083	2x3	Warren,O. V4
.095	¾x1⅜	Warren,O. V4
.095	⅞x1¼	Warren,O. V4
.095	⅞x1½	Warren,O. V4
.095	⅞x1⅝	Warren,O. V4
.095	1x1¾	Warren,O. V4
.095	1x1¾	Warren,O. V4
.095	1x1⅞	Warren,O. V4
.095	1x2	Warren,O. V4
.095	1x2½	Warren,O. V4
.095	1¼x2	Warren,O. V4
.095	1¼x1¾	Warren,O. V4
.095	1½x1¾ to 2½x3¾	OilCity,Pa. J5
.095	1½x2	Warren,O. V4
.095	1½x3	Warren,O. V4
.095	1⅝x3	Warren,O. V4
.095	2x3	Warren,O. V4
.109	⅞x1¼	Warren,O. V4
.109	⅞x1⅜	Warren,O. V4
.109	1x1¼	Warren,O. V4
.109	1x1¾	Warren,O. V4
.109	1x1⅞	Warren,O. V4
.109	1x2	Warren,O. V4
.109	1x2½	Warren,O. V4
.109	1x2½	Warren,O. V4
.109	1¼x2	Warren,O. V4
.109	1½x2	Warren,O. V4
.109	1½x3	Warren,O. V4
.109	1⅝x3	Warren,O. V4
.109	2x2¼ to 2½x3¾	OilCity,Pa. J5
.109	2x3	Warren,O. V4
.120	1x1½	Warren,O. V4
.120	1x2	Warren,O. V4
.120	1x2¼	Warren,O. V4
.120	1x2½	Warren,O. V4
.120	1¼x2	Warren,O. V4
.120	1½x1¾	Warren,O. V4
.120	1½x2	Warren,O. V4
.120	1½x3	Warren,O. V4
.120	2x2¼ to 2½x3¾	OilCity,Pa. J5
.120	2x3	Warren,O. V4
.134	1x2	Warren,O. V4
.134	1x2¼	Warren,O. V4
.134	1x2½	Warren,O. V4
.134	1¼x2	Warren,O. V4
.134	1½x1¾	Warren,O. V4
.134	1½x2	Warren,O. V4
.134	1½x3	Warren,O. V4
.134	1⅝x3	Warren,O. V4
.134	2x2¼ to 2½x3¾	OilCity,Pa. J5
.134	2x3	Warren,O. V4

Republic Steel Corp.'s Steel & Tubes Division also produces this product at Brooklyn, N.Y., Ferndale, Mich., and Cleveland.

Square—Welded, Cold-Rolled

.010–.065	.200–.625	Springfield,O. A2
.025–.083	½–2	Farrell,Pa. B9
.028	½	Warren,O. V4
.028	⅝	Warren,O. V4
.028	¾	Warren,O. V4
.028–.083	¼–2¼	Piqua,O. A10
.035	½	Warren,O. V4
.035	½–1¾	OilCity,Pa. J5
.035	⅝	Warren,O. V4
.035	¾	Warren,O. V4
.035	⅞	Warren,O. V4
.035	1	Warren,O. V4
.035	1¼	Warren,O. V4
.035	1⅜	Warren,O. V4
.035	1½	Warren,O. V4
.035	1¾	Warren,O. V4
.035–.134	¼–1½	LosAngeles P2
.049	½–2⅝	OilCity,Pa. J5
.050	½	Warren,O. V4
.050	⅝	Warren,O. V4
.050	¾	Warren,O. V4
.050	⅞	Warren,O. V4
.050	1	Warren,O. V4
.050	1¼	Warren,O. V4
.050	1⅜	Warren,O. V4
.050	1½	Warren,O. V4
.050	1¾	Warren,O. V4
.050	2	Warren,O. V4
.050	2½	Warren,O. V4
.050	3	Warren,O. V4
.050	3½	Warren,O. V4
.050	4	Warren,O. V4
.058	1¼	Warren,O. V4
.058	1½	Warren,O. V4
.058	1¾	Warren,O. V4
.058	2	Warren,O. V4
.058	2½	Warren,O. V4
.065	½	Warren,O. V4
.065	⅝	Warren,O. V4
.065	¾	Warren,O. V4
.065	⅞	Warren,O. V4
.065	1	Warren,O. V4
.065	1¼	Warren,O. V4
.065	1⅜	Warren,O. V4
.065	1½	Warren,O. V4
.065	1¾	Warren,O. V4
.065	2	Warren,O. V4
.065	2½	Warren,O. V4
.083	¾–3½	OilCity,Pa. J5
.083	⅞	Warren,O. V4
.083	1	Warren,O. V4
.083	1¼	Warren,O. V4
.083	1⅜	Warren,O. V4
.083	1½	Warren,O. V4
.083	1¾	Warren,O. V4
.083	2	Warren,O. V4
.083	2½	Warren,O. V4
.095	1	Warren,O. V4
.095	1¼	Warren,O. V4
.095	1⅜	Warren,O. V4
.095	1½	Warren,O. V4
.095	1¾	Warren,O. V4
.095	1½–3⅛	OilCity,Pa. J5
.095	1¾	Warren,O. V4
.095	2	Warren,O. V4
.095	2½	Warren,O. V4
.109	1¼	Warren,O. V4
.109	1½	Warren,O. V4
.109	1¾	Warren,O. V4
.109	2	Warren,O. V4
.109	2–3⅛	OilCity,Pa. J5
.109	2½	Warren,O. V4
.120	1¼	Warren,O. V4
.120	1½	Warren,O. V4
.120	1¾	Warren,O. V4
.120	2	Warren,O. V4
.120	2–3⅛	OilCity,Pa. J5
.120	2½	Warren,O. V4
.134	1½	Warren,O. V4
.134	1¾	Warren,O. V4
.134	2	Warren,O. V4
.134	2–3⅛	OilCity,Pa. J5
.134	2½	Warren,O. V4

Republic Steel Corp.'s Steel & Tubes Division also produces this product at Brooklyn, N. Y., Ferndale, Mich., and Cleveland.

SEAMLESS, COLD-FINISHED

Round

ALL	⅛–6	Wallington,N.J. T12
.005–.187	.031–1½	Philadelphia I-6
.016–.120	⅛–1½	Adrian,Mich. S2
.018–.095	1–1¼	Carnegie,Pa. S22
.018–.187	¼ up to but not including 1 in.	Carnegie,Pa. S22
.018–.500	¼–3	SouthLyon,Mich. M7
.020–.083	over 1¼–2¼	Carnegie,Pa. S22
.020–.219	⅜–2¾	LosAngeles P2
.023–.095	2⅜–3	Carnegie,Pa. S22
.025–1.00	⅛–6½	Milwaukee G3
.028–1¼	⅛–7	Shelby,O. O2
.031–.065	3⅛–4	Carnegie,Pa. S22
.065–1½	¾–13	Allenport,Pa. P7
.125 max.	.008–.625	Morristown,Pa. S23
.500 and heavier	1½–9½	Canton,O. T7

Square

.020–.134	¼–1½	LosAngeles P2
.055–.125	¼–2½	Carnegie,Pa. S22
.058–.250	¼–2½	SouthLyon,Mich. M7
.035–.250	½–3½	Milwaukee G3
.125 max.	.500 max.	Norristown,Pa. S23

Rectangular

.020–.134	¼x¾ to ¾x2	LosAngeles P2
.035–.125	¼x⅝ to 1x2	Carnegie,Pa. S22
.035–.250	½x¾ to 2x4	Milwaukee G3
.035–.250	.3 in. major dimension by any minor dimension but square area cannot exceed 2½ in. Minimum minor dimension, ¼ in.	SouthLyon,Mich. M7
.125 max.	¼x¾ max.	Norristown,Pa. S23

FLAT-ROLLED ELECTRICAL STEEL

(Code number following mill point indicates producing company, key on page 38)

Field Grade

—CUT LENGTHS

Elec. Sht. Ga.	Max. Width Max. Length (inches)	Mill Point, Producer
20	36x120	Ind. Harbor, Ind. I-2
20	40x120	Mansfield, O. E6
21	36x120	Ind. Harbor, Ind. I-2
21	40x120	Mansfield, O. E6
22	36x120	Ind. Harbor, Ind. I-2
22	40x120	Mansfield, O. E6
22	42x120	Newport, Ky. N9
22	48x124	BeechBottom W10
23	36x120	Ind. Harbor, Ind. I-2
23	40x120	Mansfield, O. E6
23	42x120	Newport, Ky. N9
23	48x124	BeechBottom W10
24	36x120	Ind. Harbor, Ind. I-2
24	40x120	Mansfield, O. E6
24	42x120	Newport, Ky. N9
24	48x124	BeechBottom W10
25	36x124	BeechBottom W10
25	40x120	Mansfield, O. E6
25	42x120	Newport, Ky. N9
26	36x124	BeechBottom W10
26	40x120	Mansfield, O. E6
26	42x120	Newport, Ky. N9
27	42x120	Newport, Ky. N9
28	42x120	Newport, Ky. N9
28	40x120	Newport, Ky. N9
30	40x120	Newport, Ky. N9

—COILS

Elec. Sht. Ga.	Max. Width (in.)	Mill Point, Producer
22	10	Warren, O. R2
22	36	IndianaHarbor, Ind. I-2
23	10	Warren, O. R2
23	36	IndianaHarbor, Ind. I-2
24	10	Warren, O. R2
24	36	IndianaHarbor, Ind. I-2
25	10	Warren, O. R2
26	36	IndianaHarbor, Ind. I-2
27	10	Warren, O. R2
28	10	Warren, O. R2
29	10	Warren, O. R2

Armature Grade

—CUT LENGTHS

Elec. Sht. Ga.	Max. Width Max. Length (inches)	Mill Point, Producer
20	36x120	Ind. Harbor, Ind. I-2
20	40x120	Mansfield, O. E6
21	36x120	Ind. Harbor, Ind. I-2
21	40x120	Mansfield, O. E6
22	35¾x124	BeechBottom W10
22	36x120	Ind. Harbor, Ind. I-2
22	36x..	Warren, O. R2
22	40x120	Mansfield, O. E6
22	40x120	Niles, O. N12
22	42x120	Newport, Ky. N9
23	35¾x124	BeechBottom W10
23	36x120	Ind. Harbor, Ind. I-2
23	36x124	Zanesville, O. A10
23	36x..	Warren, O. R2
23	40x120	Mansfield, O. E6
23	40x120	Niles, O. N12
23	42x120	Newport, Ky. N9
24	35¾x124	BeechBottom W10
24	36x120	Ind. Harbor, Ind. I-2
24	36x124	Zanesville, O. A10
24	36x..	Warren, O. R2
24	40x120	Mansfield, O. E6
24	40x120	Niles, O. N12
24	42x120	Newport, Ky. N9
25	34½x124	BeechBottom W10
25	36x120	Ind. Harbor, Ind. I-2
25	36x124	Zanesville, O. A10
25	36x..	Warren, O. R2
25	40x120	Mansfield, O. E6
25	40x120	Niles, O. N12
25	42x120	Newport, Ky. N9
26	34½x124	BeechBottom W10
26	36x120	Ind. Harbor, Ind. I-2
26	36x124	Zanesville, O. A10
26	36x..	Warren, O. R2
26	40x120	Mansfield, O. E6
26	40x120	Niles, O. N12
26	42x120	Newport, Ky. N9
27	36x124	Zanesville, O. A10
27	36x..	Warren, O. R2
27	40x120	Niles, O. N12
27	42x120	Newport, Ky. N9
28	36x124	Zanesville, O. A10
28	36x..	Warren, O. R2
28	40x120	Niles, O. N12
28	42x120	Newport, Ky. N9
29	36x..	Warren, O. R2
29	40x120	Niles, O. N12
29	40x120	Newport, Ky. N9

Armature Grade

—COILS

Elec. Sht. Ga.	Max. Width (in.)	Mill Point, Producer
22	10	Warren, O. R2
22	36	IndianaHarbor, Ind. I-2
23	10	Warren, O. R2
23	36	IndianaHarbor, Ind. I-2
24	10	Warren, O. R2
24	36	IndianaHarbor, Ind. I-2
25	10	Warren, O. R2
25	36	IndianaHarbor, Ind. I-2
26	10	Warren, O. R2
26	36	IndianaHarbor, Ind. I-2
27	10	Warren, O. R2
28	10	Warren, O. R2
29	10	Warren, O. R2

Electrical Grade

—CUT LENGTHS

Elec. Sht. Ga.	Max. Width Max. Length (inches)	Mill Point, Producer
20	36x144	Parkersburg, W. Va. F4
20	40x120	Mansfield, O. E6
21	36x144	Parkersburg, W. Va. F4
21	40x120	Mansfield, O. E6
22	35¾x124	BeechBottom W10
22	36x144	Parkersburg, W. Va. F4
22	36x144	Vandergrift, Pa. U5
22	36x..	Warren, O. R2
22	40x120	Mansfield, O. E6
22	40x120	Niles, O. N12
22	42x120	Newport, Ky. N9
23	35¾x124	BeechBottom W10
23	36x124	Zanesville, O. A10
23	36x144	Parkersburg, W. Va. F4
23	36x144	Vandergrift, Pa. U5
23	36x..	Warren, O. R2
23	40x120	Mansfield, O. E6
23	40x120	Niles, O. N12
23	42x120	Newport, Ky. N9
24	35¾x124	BeechBottom W10
24	36x120	Ind. Harbor, Ind. I-2
24	36x124	Zanesville, O. A10
24	36x144	Brackenridge, Pa. A4
24	36x144	Parkersburg, W. Va. F4
24	36x144	Vandergrift, Pa. U5
24	36x..	Warren, O. R2
24	40x120	Mansfield, O. E6
24	40x120	Niles, O. N12
24	42x120	Newport, Ky. N9
24	50x120	Brackenridge, Pa. A4
25	35¾x124	BeechBottom W10
25	36x120	Ind. Harbor, Ind. I-2
25	36x124	Zanesville, O. A10
25	36x144	Parkersburg, W. Va. F4
25	36x144	Vandergrift, Pa. U5
25	36x..	Warren, O. R2
25	40x120	Mansfield, O. E6
25	40x120	Niles, O. N12
25	42x120	Newport, Ky. N9
26	35¾x124	BeechBottom W10
26	36x120	Ind. Harbor, Ind. I-2
26	36x124	Zanesville, O. A10
26	36x144	Brackenridge, Pa. A4
26	36x144	Parkersburg, W. Va. F4
26	36x144	Vandergrift, Pa. U5
26	36x..	Warren, O. R2
26	40x120	Mansfield, O. E6
26	40x120	Niles, O. N12
26	42x120	Newport, Ky. N9
26	50x120	Brackenridge, Pa. A4
27	35¾x124	BeechBottom W10
27	36x120	Ind. Harbor, Ind. I-2
27	36x124	Zanesville, O. A10
27	36x144	Parkersburg, W. Va. F4
27	36x144	Vandergrift, Pa. U5
27	36x..	Warren, O. R2
27	40x120	Niles, O. N12
27	42x120	Newport, Ky. N9
28	34½x124	BeechBottom W10
28	36x120	Ind. Harbor, Ind. I-2
28	36x124	Zanesville, O. A10
28	36x144	Parkersburg, W. Va. F4
28	36x144	Vandergrift, Pa. U5
28	36x..	Warren, O. R2
28	40x120	Niles, O. N12
28	42x120	Newport, Ky. N9
29	34½x124	BeechBottom W10
29	36x124	Zanesville, O. A10
29	36x144	Brackenridge, Pa. A4
29	36x144	Parkersburg, W. Va. F4
29	36x144	Vandergrift, Pa. U5
29	36x..	Warren, O. R2
29	40x120	Newport, Ky. N9
29	40x120	Niles, O. N12
29	50x108	Brackenridge, Pa. A4
30	40x120	Newport, Ky. N9

Electrical Grade

—COILS

Elec. Sht. Ga.	Max. Width (in.)	Mill Point, Producer
20	36	GraniteCity, Ill. G4
21	36	GraniteCity, Ill. G4
22	10	Warren, O. R2
22	36	GraniteCity, Ill. G4
22	42	Vandergrift, Pa. U5
23	10	Warren, O. R2
23	36	GraniteCity, Ill. G4
23	36	Zanesville, O. A10
23	42	Vandergrift, Pa. U5
24	10	Warren, O. R2
24	36	GraniteCity, Ill. G4
24	36	Zanesville, O. A10
24	42	Vandergrift, Pa. U5
25	10	Warren, O. R2
25	36	GraniteCity, Ill. G4
25	36	Zanesville, O. A10
25	42	Vandergrift, Pa. U5
26	10	Warren, O. R2
26	36	GraniteCity, Ill. G4
26	36	Zanesville, O. A10
26	42	Vandergrift, Pa. U5
27	10	Warren, O. R2
27	36	GraniteCity, Ill. G4
27	36	Zanesville, O. A10
27	42	Vandergrift, Pa. U5
28	10	Warren, O. R2
28	36	GraniteCity, Ill. G4
28	36	Zanesville, O. A10
28	42	Vandergrift, Pa. U5
29	10	Warren, O. R2
29	36	GraniteCity, Ill. G4
29	36	Zanesville, O. A10
29	42	Vandergrift, Pa. U5

Motor Grade

—CUT LENGTHS

Elec. Sht. Ga.	Max. Width Max. Length (inches)	Mill Point, Producer
20	36x144	Parkersburg, W. Va. F4
20	40x120	Mansfield, O. E6
21	36x144	Parkersburg, W. Va. F4
21	40x120	Mansfield, O. E6
22	35x124	BeechBottom W10
22	36x144	Parkersburg, W. Va. F4
22	36x144	Vandergrift, Pa. U5
22	36x..	Warren, O. R2
22	40x120	Mansfield, O. E6
22	42x120	Newport, Ky. N9
23	35x124	BeechBottom W10
23	36x124	Zanesville, O. A10
23	36x144	Parkersburg, W. Va. F4
23	36x144	Vandergrift, Pa. U5
23	36x144	Vandergrift, Pa. U5
23	36x..	Warren, O. R2
23	40x120	Mansfield, O. E6
23	42x120	Newport, Ky. N9
24	35x124	BeechBottom W10
24	36x121	Zanesville, O. A10
24	36x144	Brackenridge, Pa. A4
24	36x144	Parkersburg, W. Va. F4
24	36x144	Vandergrift, Pa. U5
24	36x..	Warren, O. R2
24	40x120	Mansfield, O. E6
24	42x120	Newport, Ky. N9
24	50x120	Brackenridge, Pa. A4
25	35x124	BeechBottom W10
25	36x124	Zanesville, O. A10
25	36x144	Parkersburg, W. Va. F4
25	36x144	Vandergrift, Pa. U5
25	36x..	Warren, O. R2
25	40x120	Mansfield, O. E6
25	42x120	Newport, Ky. N9
26	35x124	BeechBottom W10
26	36x124	Zanesville, O. A10
26	36x144	Brackenridge, Pa. A4
26	36x144	Parkersburg, W. Va. F4
26	36x144	Vandergrift, Pa. U5
26	36x..	Warren, O. R2
26	40x120	Mansfield, O. E6
26	42x120	Newport, Ky. N9
26	50x120	Brackenridge, Pa. A4
27	35x124	BeechBottom W10
27	36x124	Zanesville, O. A10
27	36x144	Parkersburg, W. Va. F4
27	36x144	Vandergrift, Pa. U5
27	36x..	Warren, O. R2
27	42x120	Newport, Ky. N9
28	34x124	BeechBottom W10
28	36x124	Zanesville, O. A10
28	36x144	Parkersburg, W. Va. F4
28	36x144	Vandergrift, Pa. U5
28	36x..	Warren, O. R2
28	42x120	Newport, Ky. N9
29	34x124	BeechBottom W10
29	36x124	Zanesville, O. A10
29	36x144	Brackenridge, Pa. A4
29	36x144	Parkersburg, W. Va. F4
29	36x144	Vandergrift, Pa. U5
29	36x..	Warren, O. R2
29	40x120	Newport, Ky. N9
29	50x108	Brackenridge, Pa. A4
30	40x120	Newport, Ky. N9

Motor Grade

—COILS

Elec. Sht. Ga.	Max. Width (in.)	Mill Point, Producer
20	36	GraniteCity, Ill. G4
21	36	GraniteCity, Ill. G4
22	10	Warren, O. R2
22	36	GraniteCity, Ill. G4
22	42	Vandergrift, Pa. U5
23	10	Warren, O. R2
23	36	GraniteCity, Ill. G4
23	36	Zanesville, O. A10
23	42	Vandergrift, Pa. U5
24	10	Warren, O. R2
24	36	GraniteCity, Ill. G4
24	36	Zanesville, O. A10
24	42	Vandergrift, Pa. U5
25	10	Warren, O. R2
25	36	GraniteCity, Ill. G4
25	36	Zanesville, O. A10
25	42	Vandergrift, Pa. U5
26	10	Warren, O. R2
26	36	GraniteCity, Ill. G4
26	36	Zanesville, O. A10
26	42	Vandergrift, Pa. U5
27	10	Warren, O. R2
27	36	GraniteCity, Ill. G4
27	36	Zanesville, O. A10
27	42	Vandergrift, Pa. U5
28	10	Warren, O. R2
28	36	GraniteCity, Ill. G4
28	36	Zanesville, O. A10
28	42	Vandergrift, Pa. U5
29	10	Warren, O. R2
29	36	GraniteCity, Ill. G4
29	36	Zanesville, O. A10
29	42	Vandergrift, Pa. U5

Dynamo Grade

—CUT LENGTHS

Elec. Sht. Ga.	Max. Width Max. Length (inches)	Mill Point, Producer
20	36x144	Parkersburg, W. Va. F4
21	36x144	Parkersburg, W. Va. F4
22	35x124	BeechBottom W10
22	36x144	Parkersburg, W. Va. F4
22	36x144	Vandergrift, Pa. U5
22	42x120	Newport, Ky. N9
23	35x124	BeechBottom W10
23	36x124	Zanesville, O. A10
23	36x144	Parkersburg, W. Va. F4
23	36x144	Vandergrift, Pa. U5
23	42x120	Newport, Ky. N9
24	35x124	BeechBottom W10
24	36x124	Zanesville, O. A10
24	36x144	Brackenridge, Pa. A4
24	36x144	Parkersburg, W. Va. F4
24	36x144	Vandergrift, Pa. U5
24	40x120	Mansfield, O. E6
24	42x120	Newport, Ky. N9
24	50x120	Brackenridge, Pa. A4
25	35x124	BeechBottom W10
25	36x124	Zanesville, O. A10
25	36x144	Parkersburg, W. Va. F4
25	36x144	Vandergrift, Pa. U5
25	40x120	Mansfield, O. E6
25	42x120	Newport, Ky. N9
26	35x124	BeechBottom W10
26	36x124	Zanesville, O. A10
26	36x144	Brackenridge, Pa. A4
26	36x144	Parkersburg, W. Va. F4
26	36x144	Vandergrift, Pa. U5
26	40x120	Mansfield, O. E6
26	42x120	Newport, Ky. N9
26	50x120	Brackenridge, Pa. A4
27	35x124	BeechBottom W10
27	36x124	Zanesville, O. A10
27	36x144	Parkersburg, W. Va. F4
27	36x144	Vandergrift, Pa. U5
27	40x120	Mansfield, O. E6
27	42x120	Newport, Ky. N9
28	34x124	BeechBottom W10
28	36x124	Zanesville, O. A10
28	36x144	Parkersburg, W. Va. F4
28	36x144	Vandergrift, Pa. U5
28	40x120	Mansfield, O. E6
28	42x120	Newport, Ky. N9
29	34x124	BeechBottom W10
29	36x124	Zanesville, O. A10
29	36x144	Brackenridge, Pa. A4
29	36x144	Parkersburg, W. Va. F4
29	36x144	Vandergrift, Pa. U5
29	40x120	Mansfield, O. E6
29	40x120	Newport, Ky. N9
29	50x108	Brackenridge, Pa. A4
30	40x120	Newport, Ky. N9

FLAT-ROLLED ELECTRICAL STEEL

(Code number following mill point indicates producing company, key on page 38)

Dynamo Grade

—COILS

Elec. Sht. Ga.	Max. Width (in.)	Mill Point, Producer
22	10	Warren,O. R2
22	42	Vandergrift,Pa. U5
23	10	Warren,O. R2
23	36	Zanesville,O. A10
23	42	Vandergrift,Pa. U5
24	10	Warren,O. R2
24	36	Zanesville,O. A10
24	42	Vandergrift,Pa. U5
25	10	Warren,O. R2
25	36	Zanesville,O. A10
25	42	Vandergrift,Pa. U5
26	10	Warren,O. R2
26	36	Zanesville,O. A10
26	42	Vandergrift,Pa. U5
27	10	Warren,O. R2
27	36	Zanesville,O. A10
27	42	Vandergrift,Pa. U5
28	10	Warren,O. R2
28	36	Zanesville,O. A10
28	42	Vandergrift,Pa. U5
29	10	Warren,O. R2
29	36	Zanesville,O. A10
29	42	Vandergrift,Pa. U5

Transformer 72

—CUT LENGTHS

Elec. Sht. Ga.	Max.Width Max.Length (inches)	Mill Point, Producer
20	36x144	Parkersburg,W.Va. F4
21	36x144	Parkersburg,W.Va. F4
22	36x144	Parkersburg,W.Va. F4
22	42x120	Newport,Ky. N9
23	36x124	Zanesville,O. A10
23	36x144	Parkersburg,W.Va. F4
23	42x120	Newport,Ky. N9
24	36x124	BeechBottom W10
24	36x124	Zanesville,O. A10
24	36x144	Brackenridge,Pa. A4
24	36x144	Parkersburg,W.Va. F4
24	42x120	Newport,Ky. N9
25	36x124	Zanesville,O. A10
25	36x144	Parkersburg,W.Va. F4
25	42x120	Newport,Ky. N9
26	35x124	BeechBottom W10
26	36x124	Zanesville,O. A10
26	36x144	Brackenridge,Pa. A4
26	36x144	Parkersburg,W.Va. F4
26	42x120	Newport,Ky. N9
26	46x120	Brackenridge,Pa. A4
27	35x124	BeechBottom W10
27	36x124	Zanesville,O. A10
27	36x144	Parkersburg,W.Va. F4
27	42x120	Newport,Ky. N9
28	35x124	BeechBottom W10
28	36x124	Zanesville,O. A10
28	36x144	Parkersburg,W.Va. F4
28	42x120	Newport,Ky. N9
29	35x124	BeechBottom W10
29	36x124	Zanesville,O. A10
29	36x144	Brackenridge,Pa. A4
29	36x144	Parkersburg,W.Va. F4
29	40x120	Newport,Ky. N9
29	46x120	Brackenridge,Pa. A4
30	40x120	Newport,Ky. N9

—COILS

Elec. Sht. Ga.	Max. Width (in.)	Mill Point, Producer
22	10	Warren,O. R2
23	10	Warren,O. R2
23	36	Zanesville,O. A10
24	10	Warren,O. R2
24	36	Zanesville,O. A10
25	10	Warren,O. R2
25	36	Zanesville,O. A10
26	10	Warren,O. R2
26	36	Zanesville,O. A10
27	10	Warren,O. R2
27	36	Zanesville,O. A10
28	10	Warren,O. R2
28	36	Zanesville,O. A10
29	10	Warren,O. R2
29	36	Zanesville,O. A10

Transformer 65

—CUT LENGTHS

Elec. Sht. Ga.	Max.Width Max.Length (inches)	Mill Point, Producer
24	34x124	BeechBottom W10
25	34x124	BeechBottom W10
26	30x120	Zanesville,O. A10
26	34x124	BeechBottom W10
26	36x144	Brackenridge,Pa. A4
26	46x120	Brackenridge,Pa. A4
27	34x124	BeechBottom W10
28	32x124	BeechBottom W10
29	30x120	Zanesville,O. A10
29	32x124	BeechBottom W10
29	36x144	Brackenridge,Pa. A4
29	46x120	Brackenridge,Pa. A4

—COILS

Elec. Sht. Ga.	Max. Width (in.)	Mill Point, Producer
26	36	Zanesville,O. A10
29	30	Zanesville,O. A10

Transformer 58

—CUT LENGTHS

Elec. Sht. Ga.	Max.Width Max.Length (inches)	Mill Point, Producer
24	34x124	BeechBottom W10
25	34x124	BeechBottom W10
26	30x120	Zanesville,O. A10
26	34x124	BeechBottom W10
26	36x144	Brackenridge,Pa. A4
26	46x120	Brackenridge,Pa. A4
27	34x124	BeechBottom W10
28	32x124	BeechBottom W10
29	30x120	Zanesville,O. A10
29	32x124	BeechBottom W10
29	36x144	Brackenridge,Pa. A4
29	46x120	Brackenridge,Pa. A4

—COILS

Elec. Sht. Ga.	Max. Width (in.)	Mill Point, Producer
26	30	Zanesville,O. A10
29	30	Zanesville,O. A10

Transformer 52

—CUT LENGTHS

Elec. Sht. Ga.	Max.Width Max.Length (inches)	Mill Point, Producer
24	34x124	BeechBottom W10
25	34x124	BeechBottom W10
26	34x124	BeechBottom W10
27	34x124	BeechBottom W10
28	32x124	BeechBottom W10
29	30x120	Zanesville,O. A10
29	32x124	BeechBottom W10

—COILS

Elec. Sht. Ga.	Max. Width (in.)	Mill Point, Producer
29	30	Zapesville,O. A10

Transf'er 100, 90

—CUT LENGTHS

Elec. Sht. Ga.	Max.Width Max.Length (inches)	Mill Point, Producer
29	36x132	Vandergrift,Pa. U5

Transformer 80, 73

—CUT LENGTHS

Elec. Sht. Ga.	Max.Width Max.Length (inches)	Mill Point, Producer
29	30x120	Zanesville,O. A10
29	36x132	Vandergrift,Pa. U5

—COILS

Elec. Sht. Ga.	Max. Width (in.)	Mill Point, Producer
29	30	Zanesville,O. A10

COARSE ROUND WIRE (Carbon Steel)

MANUFACTURERS — MANUFACTURERS

(Code number following mill point indicates producing company, key on page 38)

Manufacturers Coarse Wire

Alabama City,Ala. R2
Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Buffalo M3
Buffalo W12
Chicago R2
Chicago W13
Cleveland A7
Cortland,N.Y. W11
Crawfordsv'le,Ind. MS
Donora,Pa. A7
Duluth A7
Fostoria,O. S1
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
Joliet,Ill. A7
KansasCity,Mo. S5
Kokomo,Ind. C16
LosAngeles B3
LosAngeles D1
MapleHeights,O. C20
Monessen,Pa. P7
Newark,N.J. I-1
Portsmouth,O. D2
Pueblo,Colo. C10
Rankin,Pa. A7
Shelton,Conn. D5
S.SanFran,Calif. C21
SparrowsPoint,Md. B2
Sterling,Ill. N15
Waukegan,Ill. A7
Worcester,Mass. A7

SPECIAL PURPOSE WIRE

Bag Tie Wire

Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Cortland,N.Y. W11
Crawfordsv'le,Ind. MS
Fostoria,O. S1
Houston S5
Johnstown,Pa. B2
KansasCity,Mo. S5
LosAngeles B3
LosAngeles D1
Palmer,Mass. W12
Portsmouth,O. D2
S.SanFran,Calif. C21
SparrowsPoint,Md. B2
Waukegan,Ill. A7
Worcester,Mass. A7

Bale Tie Wire—Cross Head

Alton,Ill. L1
Bartonville,Ill. K4
Cleveland A7
Crawfordsv'le,Ind. MS
Donora,Pa. A7
Johnstown,Pa. B2
Rankin,Pa. A7
SparrowsPoint,Md. B2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

Bale Tie Wire—Single Loop

Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Chicago W13
Cleveland A7
Crawfordsv'le,Ind. MS
Donora,Pa. A7
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
Kokomo,Ind. C16
LosAngeles D1
Minnequa,Colo. C10
Monessen,Pa. P7
Pittsburg,Calif. C11
Rankin,Pa. A7
S.SanFran.,Calif. C21
SparrowsPoint,Md. B2
Sterling,Ill. N15
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

Baling Wire

Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Chicago W13
Cortland,N.Y. W11
Crawfordsv'le,Ind. MS
Donora,Pa. A7
Duluth A7
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
Joliet,Ill. A7
KansasCity,Mo. S5
Kokomo,Ind. C16
LosAngeles D1
Minnequa,Colo. C10
Monessen,Pa. P7
Newark,N.J. I-1
Pittsburg,Calif. C11
Portsmouth,O. D2
S.SanFran.,Calif. C21
SparrowsPoint,Md. B2
Sterling,Ill. N15
Struthers,O. Y1

Basket Handle Wire

Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Buffalo M3
Buffalo W12
Chicago W13
Cleveland A7
Cortland,N.Y. W11
Crawfordsv'le,Ind. MS
Donora,Pa. A7
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
KansasCity,Mo. S5
LosAngeles E3
LosAngeles D1
Minnequa,Colo. C10
Monessen,Pa. P7
Newark,N.J. I-1
Palmer,Mass. W12
Portsmouth,O. D2
S.SanFran.,Calif. C21
SparrowsPoint,Md. B2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

Binding Wire

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo M3
Buffalo W12
Chicago W13
Cleveland A7
Cortland,N.Y. W11
Crawfrdsv'le,Ind. MS
Donora,Pa. A7
Duluth A7
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
KansasCity,Mo. S5
Kokomo,Ind. C16
Minnequa,Colo. C10
Monessen,Pa. P7
Newark,N.J. I-1
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
So.SanFran.,Calif. C21
SparrowsPoint,Md. B2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

Can Key Wire

Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Buffalo W12
Chicago W13
Cleveland A7
Cortland,N.Y. W11
Crawfrdsv'le,Ind. MS
Donora,Pa. A7
Fostoria,O. S1
Houston S5
Jacksonville,Fla. MS
Joliet,Ill. A7
KansasCity,Mo. S5
LosAngeles D1
Monessen,Pa. P7
Newark,N.J. I-1
Pittsburg,Calif. C11
Portsmouth,O. D2
Rankin,Pa. A7
So.SanFran.,Calif. C21
SparrowsPoint,Md. B2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

Clothes Pin Wire

Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Cortland,N.Y. W11
Crawfordsv'le,Ind. MS
Donora,Pa. A7
Duluth A7
Houston S5
Jacksonville,Fla. MS
KansasCity,Mo. S5
Monessen,Pa. P7
Newark,N.J. I-1
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
So.SanFrancisco C21
SparrowsPoint,Md. B2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

COARSE ROUND WIRE (Carbon Steel)

MANUFACTURERS — MANUFACTURERS

(Code number following mill point indicates producing company, key on page 38)

Coat Hanger Wire

Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Buffalo W12
Chicago W13
Cleveland A7
Cleveland A9
Cortland,N.Y. W11
Crawfordsv'le,Ind. MS
Donora,Pa. A7
Duluth A7
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
KansasCity,Mo. S5
Kokomo,Ind. C16
LosAngeles B3
LosAngeles D1
Minnequa,Colo. C10
Monessen,Pa. P7
Newark,N.J. I-1
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
Rankin,Pa. A7
So.SanFrancisco C21
SparrowsPoint,Md. B2
Sterling,Ill. N15
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

Cotter Pin Wire

Alton,Ill. L1
Buffalo W12
Cleveland A7
Crawfordsv'le,Ind. MS
Fostoria,O. S1
Johnstown,Pa. B2
Kokomo,Ind. C16
LosAngeles D1
Newark,N.J. I-1
Portsmouth,O. D2
SparrowsPoint,Md. B2
Waukegan,Ill. A7
Worcester,Mass. A7

Crimping Wire (except for upholstery)

Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Buffalo M3
Buffalo W12
Chicago W13
Cleveland A7
Cortland,N.Y. W11
Crawfordsv'le,Ind. MS
Donora,Pa. A7
Duluth A7
Fostoria,O. S1
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
KansasCity,Mo. S5
Kokomo,Ind. C16
LosAngeles B3
LosAngeles D1
Monessen,Pa. P7
Newark,N.J. I-1
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
So.SanFrancisco C21
SparrowsPoint,Md. B2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

Foundry Core Wire

Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Buffalo W12
Chicago W13
Cleveland A7
Cleveland A9
Cortland,N.Y. W11
Crawfordsv'le,Ind. MS
Donora,Pa. A7
Duluth A7
Fostoria,O. S1
Houston S5
Johnstown,Pa. B2
KansasCity,Mo. S5
Kokomo,Ind. C16
LosAngeles B3
LosAngeles D1
Monessen,Pa. P7
Newark,N.J. I-1
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
So.SanFrancisco C21
SparrowsPoint,Md. B2
Sterling,Ill. N15
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

Lintel Wire (or Head Lining Wire)

Buffalo W12
Cleveland A7
Donora,Pa. A7
Houston S5
Johnstown,Pa. B2
KansasCity,Mo. S5
LosAngeles B3
Palmer,Mass. W12
Portsmouth,O. D2
So.SanFrancisco C21
SparrowsPoint,Md. B2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

Lock Washer Wire

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Donora,Pa. A7
Johnstown,Pa. B2
KansasCity,Mo. S5
Monessen,Pa. P7
Newark,N.J. I-1
Portsmouth,O. D2
SparrowsPoint,Md. B2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

Loop Wire

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo M3
Cleveland A7
Cortland,N.Y. W11
Crawfordsv'le,Ind. MS
Donora,Pa. A7
Duluth A7
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
Joliet,Ill. A7
KansasCity,Mo. S5
LosAngeles B3
Minnequa,Colo. C10
Monessen,Pa. P7
Newark,N.J. I-1
Portsmouth,O. D2
Rankin,Pa. A7
So.SanFrancisco C21
SparrowsPoint,Md. B2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

Low Metalloid Wire—Grade 1

Houston S5
KansasCity,Mo. S5
Worcester,Mass. T6

Low Metalloid Wire—Grade 2

Houston S5
KansasCity,Mo. S5
Monessen,Pa. P7
Worcester,Mass. T6

Low Metalloid Wire—Grade 3

Cleveland A7
Houston S5
KansasCity,Mo. S5
Monessen,Pa. P7
Pittsburg,Calif. C11
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. T6

Metal Stitching Wire

Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Crawfordsv'le,Ind. MS
Fostoria,O. S1
Jacksonville,Fla. MS
Johnstown,Pa. B2
Newark,N.J. I-1
Palmer,Mass. W12
Portsmouth,O. D2
Roebling,N.J. R5
SparrowsPoint,Md. B2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Pail Bail Wire

Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Buffalo W12
Chicago W13
Cleveland A7
Cortland,N.Y. W11
Crawfordsville,Ind. MS
Donora,Pa. A7
Duluth A7
Fostoria,O. S1
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
KansasCity,Mo. S5
Kokomo,Ind. C16
LosAngeles B3
LosAngeles D1
Minnequa,Colo. C10
Monessen,Pa. P7
Newark,N.J. I-1
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
So.SanFrancisco C21
SparrowsPoint,Md. B2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

Rope Wire—Mild plow steel

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo W12
Fostoria,O. S1
Johnstown,Pa. B2
Kenosha,Wis. M2
LosAngeles B3
LosAngeles D1
Monessen,Pa. P7
NewHaven,Conn. A7
NewYork W3
Palmer,Mass. W12
Portsmouth,O. D2
Roebling,N.J. R5
So.SanFrancisco C21
SparrowsPoint,Md. B2
Struthers,O. Y1
Trenton,N.J. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Rope Wire—Plow steel

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo W12
Fostoria,O. S1
Johnstown,Pa. B2
Kenosha,Wis. M2
LosAngeles B3
LosAngeles D1
Monessen,Pa. P7
NewHaven,Conn. A7
NewYork W3
Palmer,Mass. W12
Portsmouth,O. D2
Roebling,N.J. R5
So.SanFrancisco C21
SparrowsPoint,Md. B2
Struthers,O. Y1
Trenton,N.J. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Rope Wire—Improved plow steel

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo W12
Fostoria,O. S1
Johnstown,Pa. B2
Kenosha,Wis. M2
LosAngeles B3
LosAngeles D1
Monessen,Pa. P7
NewHaven,Conn. A7
NewYork W3
Palmer,Mass. W12
Portsmouth,O. D2
Roebling,N.J. R5
So.SanFrancisco C21
SparrowsPoint,Md. B2
Struthers,O. Y1
Trenton,N.J. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Galvanized Rope Wire

Atlanta A11
Bartonville,Ill. K4
Buffalo W12
Johnstown,Pa. B2
LosAngeles D1
Monessen,Pa. P7
NewHaven,Conn. A7
Palmer,Mass. W12
Portsmouth,O. D2
Roebling,N.J. R5
SparrowsPoint,Md. B2
Struthers,O. Y1
Trenton,N.J. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Drawn Galvanized Rope Wire

Atlanta A11
Bartonville,Ill. K4
Buffalo W12
Johnstown,Pa. B2
Kenosha,Wis. M2
LosAngeles D1
Monessen,Pa. P7
NewHaven,Conn. A7
Palmer,Mass. W12
Portsmouth,O. D2
Roebling,N.J. R5
SparrowsPoint,Md. B2
Struthers,O. Y1
Trenton,N.J. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Galvanized Bridge Wire

Johnstown,Pa. B2
KansasCity,Mo. S5
Roebling,N.J. R5
SparrowsPoint,Md. B2
Trenton,N.J. A7
Worcester,Mass. T6

Screw Driver Wire

Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Donora,Pa. A7
Johnstown,Pa. B2
LosAngeles B3
Millbury,Mass. N6
Monessen,Pa. P7
Newark,N.J. I-1
Palmer,Mass. W12
Portsmouth,O. D2
Roebling,N.J. R5
Shelton,Conn. D5
SparrowsPoint,Md. B2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. T6
Worcester,Mass. W12

Shoe Nail Wire

Bartonville,Ill. K4
Buffalo M3
Cleveland A7
Cortland,N.Y. W11
Crawfrdsville,Ind. MS
Donora,Pa. A7
Johnstown,Pa. B2
Newark,N.J. I-1
Palmer,Mass. W12
Portsmouth,O. D2
Shelton,Conn. D5
SparrowsPoint,Md. B2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. W20

Spoke Wire

Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Crawfrdsville,Ind. MS
Donora,Pa. A7
Jacksonville,Fla. MS
Johnstown,Pa. B2
LosAngeles B3
MapleHeights,O. C20
Monessen,Pa. P7
Palmer,Mass. W12
Portsmouth,O. D2
Roebling,N.J. R5
SparrowsPoint,Md. B2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. T6

Stapling Wire for Box Binding Machines

Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Buffalo M3
Buffalo W12
Chicago C6
Chicago W13
Cleveland A7
Cortland,N.Y. W11
Crawfrdsville,Ind. MS
Donora,Pa. A7
Duluth A7
Fostoria,O. S1
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
KansasCity,Mo. S5
Kokomo,Ind. C16
LosAngeles B3
LosAngeles D1
Minnequa,Colo. C10
Monessen,Pa. P7
Newark,N.J. I-1
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
So.SanFrancisco C21
SparrowsPoint,Md. B2
Sterling,Ill. N15
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. T6
Worcester,Mass. W20

Strapping Wire (or Tying Wire)

Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Chicago W13
Cleveland A7
Cortland,N.Y. W11
Crawfrdsville,Ind. MS
Donora,Pa. A7
Duluth A7
Fostoria,O. S1
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
KansasCity,Mo. S5
LosAngeles B3
LosAngeles D1
Minnequa,Colo. C10
Monessen,Pa. P7
Newark,N.J. I-1
Pittsburg,Calif. C11
Portsmouth,O. D2
Rankin,Pa. A7
So.SanFrancisco C21
SparrowsPoint,Md. B2
Sterling,Ill. N15
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. T6

Telephone-Telegraph Wire—Extra Best Best

Cleveland A7
Donora,Pa. A7
Johnstown,Pa. B2
SparrowsPoint,Md. B2
Waukegan,Ill. A7

Telephone-Telegraph Wire—Best Best

Bartonville,Ill. K4
Cleveland A7
Donora,Pa. A7
Duluth A7
Johnstown,Pa. B2
Monessen,Pa. P7
Roebling,N.J. R5
SparrowsPoint,Md. B2
Waukegan,Ill. A7
Worcester,Mass. A7

Telephone-Telegraph Wire—Steel

Cleveland A7
Donora,Pa. A7
Duluth A7
Houston S5
Johnstown,Pa. B2
KansasCity,Mo. S5
Monessen,Pa. P7
SparrowsPoint,Md. B2
Waukegan,Ill. A7
Worcester,Mass. A7

Wire for Case Hardened Balls

Alton,Ill. L1
Cleveland A7
Crawfrdsville,Ind. MS
Donora,Pa. A7
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
KansasCity,Mo. S5
LosAngeles B3
Monessen,Pa. P7
Portsmouth,O. D2
Shelton,Conn. D5
So.SanFrancisco C21
SparrowsPoint,Md. B2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. W20

Wire for Chain Link Fence

Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Crawfrdsville,Ind. MS
Donora,Pa. A7
Duluth A7
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
KansasCity,Mo. S5
Kokomo,Ind. C16
LosAngeles B3
LosAngeles D1
Minnequa,Colo. C10
Monessen,Pa. P7
Newark,N.J. I-1
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
Shelton,Conn. D5
So.SanFrancisco C21
SparrowsPoint,Md. B2
Sterling,Ill. N15
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

COARSE ROUND WIRE (Carbon Steel)

MANUFACTURERS

MANUFACTURERS

(Code number following mill point indicates producing company, key on page 38)

Wire for Cold Rolling

Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Buffalo W12
Chicago W13
Cleveland A7
Cortland,N.Y. W11
Crawfordsv'le,Ind. MS
Donora,Pa. A7
Duluth A7
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
KansasCity,Mo. S5
Kokomo,Ind. C16
LosAngeles B3
Monessen,Pa. P7
Newark,N.J. I-1
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
Roebling,N.J. R5
So.SanFrancisco C21
SparrowsPoint,Md. B2
Sterling,Ill. N15
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. T6

Wire for Electric Welded Automobile and Truck Tire Skid Chains

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Crawfordsv'le,Ind. MS
Donora,Pa. A7
Duluth A7
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
KansasCity,Mo. S5
LosAngeles B3
MapleHeights,O. C20
Monessen,Pa. P7
Newark,N.J. I-1
Palmer,Mass. W12
Portsmouth,O. D2
SparrowsPoint,Md. B2
Sterling,Ill. N15
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

Wire for Electric Welded Industrial Chains

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Crawfordsville MS
Donora,Pa. A7
Duluth A7
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
KansasCity,Mo. S5
LosAngeles B3
MapleHeights,O. C20
Monessen,Pa. P7
Newark,N.J. I-1
Palmer,Mass. W12
Portsmouth,O. D2
SparrowsPoint,Md. B2
Sterling,Ill. N15
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

Wool Wire

Cleveland A7
Crawfordsv'le,Ind. MS
Donora,Pa. A7
Jacksonville,Fla. MS
Johnstown,Pa. B2
Waukegan,Ill. A7

WIRE FOR UPHOLSTERY SPRING CONSTRUCTIONS

Upholstery Spring Wire

Alton,Ill. L1
Buffalo W12
Cleveland A7
Donora,Pa. A7
Duluth A7
Johnstown,Pa. B2
KansasCity,Mo. S5
Kenosha,Wis. M2
LosAngeles B3
LosAngeles D1
Monessen,Pa. P7
NewHaven,Conn. A7
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
Roebling,N.J. R5
So.SanFrancisco C21
SparrowsPoint,Md. B2
Struthers,O. Y1
Trenton,N.J. A7
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4

High Tensile Wire for No-Sag or Zig-Zag Springs

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Donora,Pa. A7
Duluth A7
Johnstown,Pa. B2
LosAngeles B3
Monessen,Pa. P7
NewHaven,Conn. A7
Pittsburg,Calif. C11
Portsmouth,O. D2
Roebling,N.J. R5
SparrowsPoint,Md. B2
Struthers,O. Y1
Trenton,N.J. A7
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4

Hog Ring Wire

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo W12
Chicago W13
Cleveland A7
Crawfordsv'le,Ind. MS
Donora,Pa. A7
Duluth A7
Fostoria,O. S1
Houston S5
Johnstown,Pa. B2
KansasCity,Mo. S5
LosAngeles B3
LosAngeles D1
Minnequa,Colo. C10
Monessen,Pa. P7
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
Rankin,Pa. A7
So.SanFrancisco C21
SparrowsPoint,Md. B2
Sterling,Ill. N15
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. W20

Regular Lacing Wire

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Cortland,N.Y. W11
Crawfrdsv'le,Ind. MS
Donora,Pa. A7
Duluth A7
Jacksonville,Fla. MS
Johnstown,Pa. B2
KansasCity,Mo. S5
LosAngeles B3
Monessen,Pa. P7
NewHaven,Conn. A7
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
Roebling,N.J. R5
So.SanFrancisco C21
SparrowsPoint,Md. B2
Struthers,O. Y1
Trenton,N.J. A7
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. W20

Regular Round Low Carbon Border Wire

Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Buffalo W12
Chicago W13
Cleveland A7
Cortland,N.Y. W11
Crawfrdsv'le,Ind. MS
Donora,Pa. A7
Duluth A7
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
KansasCity,Mo. S5
LosAngeles B3
LosAngeles D1
Minnequa,Colo. C10
Monessen,Pa. P7
Newark,N.J. I-1
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
SparrowsPoint,Md. B2
Sterling,Ill. N15
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. W20

Round High Carbon Wire in Coils for Borders and Braces

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Donora,Pa. A7
Duluth A7
Johnstown,Pa. B2
KansasCity,Mo. S5
LosAngeles B3
LosAngeles D1
Monessen,Pa. P7
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
Roebling,N.J. R5
So.SanFrancisco C21
SparrowsPoint,Md. B2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4

Round Low Carbon Crimping Wire for Upholstery Constructions

Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Cortland,N.Y. W11
Crawfrdsv'le,Ind. MS
Donora,Pa. A7
Duluth A7
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
KansasCity,Mo. S5
LosAngeles B3
LosAngeles D1
Monessen,Pa. P7
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
So.SanFrancisco C21
SparrowsPoint,Md. B2
Sterling,Ill. N15
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

Round Low Carbon Frame Wire for Spot Welding

Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Cortland,N.Y. W11
Crawfrdsv'le,Ind. MS
Donora,Pa. A7
Duluth A7
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
KansasCity,Mo. S5
LosAngeles B3
LosAngeles D1
Minnequa,Colo. C10
Monessen,Pa. P7
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
So.SanFrancisco C21
SparrowsPoint,Md. B2
Sterling,Ill. N15
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

Round Wire for Link Fabric; to be used on Automatic Link Fabric Machines

Alton,Ill. L1
Atlanta A11
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Cortland,N.Y. W11
Crawfrdsv'le,Ind. MS
Donora,Pa. A7
Duluth A7
Houston S5
Jacksonville,Fla. MS
Johnstown,Pa. B2
KansasCity,Mo. S5
LosAngeles B3
LosAngeles D1
Monessen,Pa. P7
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
So.SanFrancisco C21
SparrowsPoint,Md. B2
Sterling,Ill. N15
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7

Special Automatic Lacing Wire

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Donora,Pa. A7
Duluth A7
Johnstown,Pa. B2
KansasCity,Mo. S5
LosAngeles B3
Monessen,Pa. P7
NewHaven,Conn. A7
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
Roebling,N.J. R5
So.SanFrancisco C21
SparrowsPoint,Md. B2
Struthers,O. Y1
Trenton,N.J. A7
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. W20

Special Upholstery Spring Wire for Use in Automatic Coiling and Knotting Machines

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Donora,Pa. A7
Duluth A7
Johnstown,Pa. B2
KansasCity,Mo. S5
LosAngeles B3
Monessen,Pa. P7
NewHaven,Conn. A7
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
Roebling,N.J. R5
So.SanFrancisco C21
SparrowsPoint,Md. B2
Trenton,N.J. A7
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4

Spring Wire for Manufacture of Close Wound Cross Helical Springs, Short and Long Helical Mattress Springs

Akron J4
Alton,Ill. L1
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Donora,Pa. A7
Duluth A7
Johnstown,Pa. B2
KansasCity,Mo. S5
LosAngeles B3
Monessen,Pa. P7
NewHaven,Conn. A7
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
Roebling,N.J. R5
So.SanFrancisco C21
SparrowsPoint,Md. B2
Trenton,N.J. A7
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. W20

Spring Wire for Severe Crimping or Clinching Upholstery Spring Constructions

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Donora,Pa. A7
Johnstown,Pa. B2
KansasCity,Mo. S5
LosAngeles B3
Monessen,Pa. P7
NewHaven,Conn. A7
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
Roebling,N.J. R5
So.SanFrancisco C21
SparrowsPoint,Md. B2
Trenton,N.J. A7
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4

WIRE FOR MANUFACTURE OF MECHANICAL SPRINGS

Oil Tempered Spring Steel Wire, MB type

Alton,Ill. L1
Buffalo W12
Cleveland A7
Fostoria,O. S1
Millbury,Mass. N6
Portsmouth,O. D2
Roebling,N.J. R5
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W12
Worcester,Mass. W20

Oil Tempered Spring Steel Wire, WMB type

Millbury,Mass. N6
Roebling,N.J. R5
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Hard Drawn Spring Steel Wire, MB type

Akron J4
Alton,Ill. L1
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Donora,Pa. A7
Duluth A7
Fostoria,O. S1
Johnstown,Pa. B2
LosAngeles B3
Monessen,Pa. P7
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
Roebling,N.J. R5
SparrowsPoint,Md. B2
Struthers,O. Y1
Trenton,N.J. A7
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Hard Drawn Spring Steel Wire, WMB type

Akron J4
Roebling,N.J. R5
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Spheroidized Annealed Spring Steel Wire, MB type

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Donora,Pa. A7
Fostoria,O. S1
Johnstown,Pa. B2
LosAngeles D1
Millbury,Mass. N6
Monessen,Pa. P7
Palmer,Mass. W12
Portsmouth,O. D2
Roebling,N.J. R5
SparrowsPoint,Md. B2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. T6

Spheroidized Annealed Spring Steel Wire, WMB type

Millbury,Mass. N6
Roebling,N.J. R5
Worcester,Mass. T6

COARSE ROUND WIRE (Carbon Steel)

MANUFACTURERS — MANUFACTURERS

(Code number following mill point indicates producing company, key on page 38)

Spheroidized Annealed and Lightly Drawn (or Bright Soft) Spring Steel Wire, MB type

Alton,Ill. L1 — Palmer,Mass. W12
Bartonville,Ill. K4 — Portsmouth,O. D2
Buffalo W12 — Roebling,N.J. R5
Cleveland A7 — SparrowsPoint,Md. B2
Donora,Pa. A7 — Struthers,O. Y1
Fostoria,O. S1 — Waukegan,Ill. A7
Johnstown,Pa. B2 — Worcester,Mass. A7
Millbury,Mass. N6 — Worcester,Mass. T6
Monessen,Pa. P7

Spheroidized Annealed and Lightly Drawn (or Bright Soft) Spring Steel Wire, WMB type

Millbury,Mass. N6 — Worcester,Mass. T6
Roebling,N.J. R5

Untempered Spring Steel Wire, MB type

Akron J4 — Palmer,Mass. W12
Alton,Ill. L1 — Pittsburg,Calif. C11
Bartonville,Ill. K4 — Portsmouth,O. D2
Buffalo W12 — Roebling,N.J. R5
Cleveland A7 — SparrowsPoint,Md. B2
Donora,Pa. A7 — Struthers,O. Y1
Duluth A7 — Trenton,N.J. A7
Fostoria,O. S1 — Waukegan,Ill. A7
Johnstown,Pa. B2 — Worcester,Mass. A7
LosAngeles B3 — Worcester,Mass. J4
LosAngeles D1 — Worcester,Mass. T6
Millbury,Mass. N6 — Worcester,Mass. W20
Monessen,Pa. P7

Untempered Spring Steel Wire, WMB type

Akron J4 — Roebling,N.J. R5
Buffalo W12 — Worcester,Mass. J4
Millbury,Mass. N6 — Worcester,Mass. T6
Palmer,Mass. W12 — Worcester,Mass. W20

Spheroidized Annealed Spring Steel Wire, HB type

Alton,Ill. L1 — Portsmouth,O. D2
Bartonville,Ill. K4 — Roebling,N.J. R5
Buffalo W12 — SparrowsPoint,Md. B2
Cleveland A7 — Struthers,O. Y1
Johnstown,Pa. B2 — Waukegan,Ill. A7
Millbury,Mass. N6 — Worcester,Mass. A7
Monessen,Pa. P7 — Worcester,Mass. T6

Spheroidized Annealed Spring Steel Wire, WHB type

Millbury,Mass. N6 — Roebling,N.J. R5
NewYork W3 — Worcester,Mass. T6

Spheroidized Annealed Spring Steel Wire, Extra HB type

Alton,Ill. L1 — Roebling,N.J. R5
Buffalo W12 — SparrowsPoint,Md. B2
Cleveland A7 — Struthers,O. Y1
Johnstown,Pa. B2 — Waukegan,Ill. A7
Millbury,Mass. N6 — Worcester,Mass. A7
Monessen,Pa. P7 — Worcester,Mass. T6
Portsmouth,O. D2

Spheroidized Annealed Spring Steel Wire, Extra WHB type

Millbury,Mass. N6 — Worcester,Mass. T6
Roebling,N.J. R5

Spheroidized Annealed and Lightly Drawn Spring Steel Wire, HB type

Alton,Ill. L1 — Roebling,N.J. R5
Bartonville,Ill. K4 — SparrowsPoint,Md. B2
Cleveland A7 — Struthers,O. Y1
Johnstown,Pa. B2 — Waukegan,Ill. A7
Millbury,Mass. N6 — Worcester,Mass. A7
Monessen,Pa. P7 — Worcester,Mass. T6
Portsmouth,O. D2

Spheroidized Annealed and Lightly Drawn Spring Steel Wire, WHB type

Millbury,Mass. N6 — Roebling,N.J. R5
NewYork W3 — Worcester,Mass. T6

Spheroidized Annealed and Lightly Drawn Spring Steel Wire, Extra HB type

Alton,Ill. L1 — SparrowsPoint,Md. B2
Cleveland A7 — Struthers,O. Y1
Johnstown,Pa. B2 — Waukegan,Ill. A7
Millbury,Mass. N6 — Worcester,Mass. A7
Monessen,Pa. P7 — Worcester,Mass. T6
Roebling,N.J. R5

Spheroidized Annealed and Lightly Drawn Spring Steel Wire, Extra WHB type

Millbury,Mass. N6 — Worcester,Mass. T6
Roebling,N.J. R5

Oil Tempered Spring Steel Wire, HB type

Alton,Ill. L1 — Waukegan,Ill. A7
Buffalo W12 — Worcester,Mass. A7
Cleveland A7 — Worcester,Mass. J4
Millbury,Mass. N6 — Worcester,Mass. T6
Portsmouth,O. D2 — Worcester,Mass. W12
Roebling,N.J. R5 — Worcester,Mass. W20

Oil Tempered Spring Steel Wire, WHB type

Millbury,Mass. N6 — Worcester,Mass. T6
Roebling,N.J. R5 — Worcester,Mass. W20
Worcester,Mass. J4

Oil Tempered Spring Steel Wire, Extra HB type

Alton,Ill. L1 — Worcester,Mass. A7
Cleveland A7 — Worcester,Mass. J4
Millbury,Mass. N6 — Worcester,Mass. T6
Roebling,N.J. R5 — Worcester,Mass. W20
Waukegan,Ill. A7

Oil Tempered Spring Steel Wire, Extra WHB type

Millbury,Mass. N6 — Worcester,Mass. T6
Roebling,N.J. R5 — Worcester,Mass. W20
Worcester,Mass. J4

Aircraft Steel Spring Wire

Bartonville,Ill. K4 — Waukegan,Ill. A7
Fostoria,O. S1 — Worcester,Mass. J4
Millbury,Mass. N6 — Worcester,Mass. T6
Portsmouth,O. D2 — Worcester,Mass. W20
Roebling,N.J. R5

Music Spring Steel Wire

Alton,Ill. L1 — Waukegan,Ill. A7
Bartonville,Ill. K4 — Worcester,Mass. A7
Millbury,Mass. N6 — Worcester,Mass. J4
NewYork W3 — Worcester,Mass. W20
Roebling,N.J. R5

Valve Spring Wire

Millbury,Mass. N6 — Roebling,N.J. R5
NewYork W3 — Waukegan,Ill. A7
Portsmouth,O. D2 — Worcester,Mass. W12

WIRE FOR COLD HEADING AND COLD FORGING

Aircraft Quality Bolt and Screw Wire

Chicago W13 — MapleHeights,O. C20
Cleveland A7 — Monessen,Pa. P7
Donora,Pa. A7 — Portsmouth,O. D2
Elyria,O. W8 — Waukegan,Ill. A7
Houston S5 — Worcester,Mass. A7
KansasCity,Mo. S5

Wood Screw Wire (for conventional slotted head type screws)

Atlanta A11 — LosAngeles B3
Bartonville,Ill. K4 — MapleHeights,O. C20
Chicago W13 — Monessen,Pa. P7
Cleveland A7 — Newark,N.J. I-1
Crawfrdsville,Ind. M8 — Pittsburg,Calif. C11
Donora,Pa. A7 — Portsmouth,O. D2
Houston S5 — SparrowsPoint,Md. B2
Jacksonville,Fla. M8 — Struthers,O. Y1
Johnstown,Pa. B2 — Waukegan,Ill. A7
KansasCity,Mo. S5 — Worcester,Mass. A7

Machine Screw Wire (for conventional slotted head type screws)

Alton,Ill. L1 — LosAngeles B3
Bartonville,Ill. K4 — MapleHeights,O. C20
Chicago W13 — Monessen,Pa. P7
Cleveland A7 — Newark,N.J. I-1
Crawfrdsville,Ind. M8 — Pittsburg,Calif. C11
Donora,Pa. A7 — Portsmouth,O. D2
Elyria,O. W8 — Shelton,Conn. D5
Houston S5 — SparrowsPoint,Md. B2
Jacksonville,Fla. M8 — Sterling,Ill. N15
Johnstown,Pa. B2 — Struthers,O. Y1
KansasCity,Mo. S5 — Waukegan,Ill. A7
Kokomo,Ind. C16 — Worcester,Mass. A7

Sheet Metal Screw Wire (for conventional slotted head type screws)

Bartonville,Ill. K4 — Monessen,Pa. P7
Chicago W13 — Newark,N.J. I-1
Cleveland A7 — Pittsburg,Calif. C11
Crawfrdsville,Ind. M8 — Portsmouth,O. D2
Donora,Pa. A7 — Shelton,Conn. D5
Houston S5 — SparrowsPoint,Md. B2
Jacksonville,Fla. M8 — Sterling,Ill. N15
Johnstown,Pa. B2 — Struthers,O. Y1
LosAngeles B3 — Waukegan,Ill. A7
MapleHeights,O. C20 — Worcester,Mass. A7

Wood Screw Wire (for recessed head type screws or struck slot screws)

Bartonville,Ill. K4 — Monessen,Pa. P7
Chicago W13 — Newark,N.J. I-1
Cleveland A7 — Pittsburg,Calif. C11
Crawfrdsville,Ind. M8 — Portsmouth,O. D2
Donora,Pa. A7 — Shelton,Conn. D5
Jacksonville,Fla. M8 — SparrowsPoint,Md. B2
Johnstown,Pa. B2 — Struthers,O. Y1
LosAngeles B3 — Waukegan,Ill. A7
MapleHeights,O. C20 — Worcester,Mass. A7

Machine Screw Wire (for recessed head type screws or struck slot screws)

Bartonville,Ill. K4 — MapleHeights,O. C20
Chicago W13 — Monessen,Pa. P7
Cleveland A7 — Newark,N.J. I-1
Crawfrdsville,Ind. M8 — Pittsburg,Calif. C11
Donora,Pa. A7 — Portsmouth,O. D2
Houston S5 — Shelton,Conn. D5
Jacksonville,Fla. M8 — SparrowsPoint,Md. B2
Johnstown,Pa. B2 — Struthers,O. Y1
KansasCity,Mo. S5 — Waukegan,Ill. A7
LosAngeles B3 — Worcester,Mass. A7

Sheet Metal Screw Wire (for recessed head type screws or struck slot screws)

Bartonville,Ill. K4 — MapleHeights,O. C20
Chicago W13 — Monessen,Pa. P7
Cleveland A7 — Newark,N.J. I-1
Crawfrdsville,Ind. M8 — Pittsburg,Calif. C11
Donora,Pa. A7 — Portsmouth,O. D2
Houston S5 — Shelton,Conn. D5
Jacksonville,Fla. M8 — SparrowsPoint,Md. B2
Johnstown,Pa. B2 — Struthers,O. Y1
KansasCity,Mo. S5 — Waukegan,Ill. A7
LosAngeles B3 — Worcester,Mass. A7

Wire for Manufacture of Special Head Type Screws (fillister head, truss head, binder head, pan head, oven head, large head, washer head, socket head)

Bartonville,Ill. K4 — MapleHeights,O. C20
Chicago W13 — Monessen,Pa. P7
Cleveland A7 — Newark,N.J. I-1
Crawfrdsville,Ind. M8 — Pittsburg,Calif. C11
Donora,Pa. A7 — Portsmouth,O. D2
Elyria,O. W8 — Shelton,Conn. D5
Houston S5 — SparrowsPoint,Md. B2
Jacksonville,Fla. M8 — Struthers,O. Y1
Johnstown,Pa. B2 — Waukegan,Ill. A7
KansasCity,Mo. S5 — Worcester,Mass. A7
LosAngeles B3

Wire for Scrapless Nuts

Cleveland A7 — Monessen,Pa. P7
Donora,Pa. A7 — SparrowsPoint,Md. B2
Elyria,O. W8 — Struthers,O. Y1
Houston S5 — Waukegan,Ill. A7
Johnstown,Pa. B2 — Worcester,Mass. A7
KansasCity,Mo. S5

Welding Wire—Electric Arc Welding Quality

Atlanta A11 — Johnstown,Pa. B2
Bartonville,Ill. K4 — KansasCity,Mo. S5
Buffalo W12 — MapleHeights,O. C20
Chicago W13 — Monessen,Pa. P7
Cleveland A7 — Newark,N.J. I-1
Cortland,N.Y. W11 — Palmer,Mass. W12
Crawfrdsville,Ind. M8 — Portsmouth,O. D2
Donora,Pa. A7 — SparrowsPoint,Md. B2
Duluth A7 — Struthers,O. Y1
Houston S5 — Waukegan,Ill. A7

Welding Wire—Gas Welding Quality

Atlanta A11 — Johnstown,Pa. B2
Bartonville,Ill. K4 — Monessen,Pa. P7
Buffalo W12 — Newark,N.J. I-1
Chicago W13 — Palmer,Mass. W12
Cleveland A7 — Portsmouth,O. D2
Cortland,N.Y. W11 — SparrowsPoint,Md. B2
Crawfrdsville,Ind. M8 — Struthers,O. Y1
Donora,Pa. A7 — Waukegan,Ill. A7

Galvanized Steel Wire for Aluminum Cable Steel Reinforcement

Alton,Ill. L1 — NewHaven,Conn. A7
Bartonville,Ill. K4 — Portsmouth,O. D2
Buffalo W12 — Roebling,N.J. R5
Cleveland A7 — SparrowsPoint,Md. B2
Donora,Pa. A7 — Struthers,O. Y1
Duluth A7 — Trenton,N.J. A7
Johnstown,Pa. B2 — Waukegan,Ill. A7
Monessen,Pa. P7 — Worcester,Mass. A7

MANUFACTURERS

FINE ROUND WIRE (Carbon Steel)

MANUFACTURERS

(Code number following mill point indicates producing company, key on page 38)

Manufacturers Fine or Weaving Wire

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo M3
Chicago C6
Chicago W13
Cleveland A7
Cortland,N.Y. W11
Crawfordsville,Ind. M8
Fostoria,O. S1
Holyoke,Mass. P18
Jacksonville,Fla. M8
KansasCity,Mo. S5
Kokomo,Ind. C16
LosAngeles D1
Newark,N.J. I-1
Palmer,Mass. W12
Portsmouth,O. D2
Roebling,N.J. R5
Shelton,Conn. D5
S.SanFran.,Calif. C21
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. W20

SPECIAL PURPOSE WIRE

Aircraft Cord Wire

Bartonville,Ill. K4
Cleveland A7
Fostoria,O. S1
Holyoke,Mass. P18
Kenosha,Wis. M2
NewHaven,Conn. A7
Palmer,Mass. W12
Portsmouth,O. D2
Roebling,N.J. R5
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Bookbinder Wire

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo M3
Buffalo W12
Chicago C6
Chicago W13
Cleveland A7
Cortland,N.Y. W11
Crawfrdsville,Ind. M8
Fostoria,O. S1
Holyoke,Mass. P18
Kokomo,Ind. C16
LosAngeles D1
Newark,N.J. I-1
Palmer,Mass. W12
Shelton,Conn. D5
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. T6
Worcester,Mass. W20

Broom Wire

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo M3
Buffalo W12
Chicago C6
Chicago W13
Cleveland A7
Cortland,N.Y. W11
Crawfrdsville,Ind. M8
Fostoria,O. S1
Holyoke,Mass. P18
Jacksonville,Fla. M8
Kokomo,Ind. C16
LosAngeles D1
Newark,N.J. I-1
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
Shelton,Conn. D5
So.SanFrancisco C21
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. T6
Worcester,Mass. W20

Brush Wire, Round Untempered—Low Carbon

Alton,Ill. L1
Buffalo M3
Buffalo W12
Chicago C6
Cleveland A7
Cortland,N.Y. W11
Crawfrdsville,Ind. M8
Jacksonville,Fla. M8
Newark,N.J. I-1
Palmer,Mass. W12
Portsmouth,O. D2
Shelton,Conn. D5
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. T6
Worcester,Mass. W20

Brush or Scratch Wire, Round Untempered

Alton,Ill. L1
Buffalo W12
Cleveland A7
Crawfrdsville,Ind. M8
Fostoria,O. S1
Jacksonville,Fla. M8
Newark,N.J. I-1
Palmer,Mass. W12
Roebling,N.J. R5
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Brush Wire, Round Untempered—High Strength

Alton,Ill. L1
Buffalo W12
Cleveland A7
Crawfrdsville,Ind. M8
Jacksonville,Fla. M8
Palmer,Mass. W12
Roebling,N.J. R5
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Brush Wire, Round Oil Tempered

Buffalo W12
Cleveland A7
Fostoria,O. S1
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Fish Hook Wire

Bartonville,Ill. K4
Cleveland A7
NewYork W3
Portsmouth,O. D2
Roebling,N.J. R5
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. T6
Worcester,Mass. W20

Flexible Shaft Wire

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo M3
Buffalo W12
Cleveland A7
Cortland,N.Y. W11
Crawfrdsville,Ind. M8
Fostoria,O. S1
Jacksonville,Fla. M8
Millbury,Mass. N6
Palmer,Mass. W12
Portsmouth,O. D2
Roebling,N.J. R5
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Florist Wire

Alton,Ill. L1
Buffalo M3
Buffalo W12
Cleveland A7
Cortland,N.Y. W11
Crawfrdsville,Ind. M8
Fostoria,O. S1
Kokomo,Ind. C16
LosAngeles D1
Newark,N.J. I-1
Roebling,N.J. R5
So.SanFrancisco C21
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. W20

Fuse Wire (for carrying current to electric detonators of explosives)

Alton,Ill. L1
Buffalo W12
Cleveland A7
Cortland,N.Y. W11
Fostoria,O. S1
Palmer,Mass. W12
Portsmouth,O. D2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. W20

Hair Pin Wire—Common Grade

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo M3
Buffalo W12
Chicago C6
Chicago W13
Cleveland A7
Cortland,N.Y. W11
Crawfrdsville,Ind. M8
Fostoria,O. S1
Jacksonville,Fla. M8
LosAngeles D1
Newark,N.J. I-1
Palmer,Mass. W12
Portsmouth,O. D2
Shelton,Conn. D5
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. T6

Hair Pin Wire—Hard Grade

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo M3
Buffalo W12
Cleveland A7
Cortland,N.Y. W11
Crawfrdsville,Ind. M8
Fostoria,O. S1
Jacksonville,Fla. M8
LosAngeles D1
Newark,N.J. I-1
Portsmouth,O. D2
Shelton,Conn. D5
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. T6
Worcester,Mass. W20

Hair Pin Wire—Bobby Pin Wire

Alton,Ill. L1
Buffalo M3
Buffalo W12
Cleveland A7
Fostoria,O. S1
Newark,N.J. I-1
Roebling,N.J. R5
Struthers,O. Y1
Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Hook and Eye Wire

Buffalo M3
Buffalo W12
Cleveland A7
Cortland,N.Y. W11
Crawfrdsville,Ind. M8
Newark,N.J. I-1
Palmer,Mass. W12
Portsmouth,O. D2
Roebling,N.J. R5
Shelton,Conn. D5
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. T6

Hose Reinforcement Wire

Alton,Ill. L1
Buffalo W12
Cleveland A7
Crawfrdsville,Ind. M8
Newark,N.J. I-1
Palmer,Mass. W12
Pittsburg,Calif. C11
Portsmouth,O. D2
Roebling,N.J. R5
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Mandolin Wire

NewYork W3
Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Paper Clip Wire

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo M3
Buffalo W12
Chicago C6
Chicago W13
Cleveland A7
Cortland,N.Y. W11
Crawfrdsville,Ind. M8
Fostoria,O. S1
Jacksonville,Fla. M8
Kokomo,Ind. C16
LosAngeles D1
Monessen,Pa. P7
Newark,N.J. I-1
Palmer,Mass. W12
Portsmouth,O. D2
Shelton,Conn. D5
Waukegan,Ill. A7
Worcester,Mass. A7

Piano Wire

Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. W20

Pin Wire, Straight or Common

Buffalo M3
Chicago C6
Cleveland A7
Cortland,N.Y. W11
Newark,N.J. I-1
Portsmouth,O. D2
Shelton,Conn. D5
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. T6

Pin Ticket Wire

Alton,Ill. L1
Buffalo M3
Buffalo W12
Chicago C6
Chicago W13
Cleveland A7
Cortland,N.Y. W11
Crawfrdsville,Ind. M8
Fostoria,O. S1
Holyoke,Mass. P18
Jacksonville,Fla. M8
Kokomo,Ind. C16
LosAngeles D1
Newark,N.J. I-1
Palmer,Mass. W12
Portsmouth,O. D2
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. W20

Pneumatic Tire Bead Wire

Akron J4
Alton,Ill. L1
Bartonville,Ill. K4
Buffalo W12
Cleveland A7
Pittsburg,Calif. C11
Portsmouth,O. D2
Roebling,N.J. R5
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. W20

Preformed Staple Wire

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo M3
Buffalo W12
Chicago C6
Cleveland A7
Cortland,N.Y. W11
Crawfrdsville,Ind. M8
Holyoke,Mass. P18
LosAngeles D1
Newark,N.J. I-1
Palmer,Mass. W12
Portsmouth,O. D2
Shelton,Conn. D5
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Safety Pin Wire

Alton,Ill. L1
Buffalo M3
Buffalo W12
Cleveland A7
Cortland,N.Y. W11
Fostoria,O. S1
Monessen,Pa. P7
Palmer,Mass. W12
Portsmouth,O. D2
Roebling,N.J. R5
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Screen Cloth Wire (for very fine mesh)

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo M3
Cleveland A7
Cortland,N.Y. W11
Crawfrdsville,Ind. M8
Fostoria,O. S1
LosAngeles D1
Palmer,Mass. W12
Portsmouth,O. D2
Struthers,O. Y1
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. W20

Spiral Binding Wire

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo M3
Buffalo W12
Chicago C6
Chicago W13
Cleveland A7
Cortland,N.Y. W11
Crawfrdsville,Ind. M8
Fostoria,O. S1
Holyoke,Mass. P18
Jacksonville,Fla. M8
Kokomo,Ind. C16
LosAngeles D1
Newark,N.J. I-1
Palmer,Mass. W12
Portsmouth,O. D2
Shelton,Conn. D5
So.SanFran.,Calif. C21
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. T6
Worcester,Mass. W20

Tag Wire

Alton,Ill. L1
Bartonville,Ill. K4
Buffalo M3
Chicago C6
Chicago W13
Cleveland A7
Cortland,N.Y. W11
Crawfrdsville,Ind. M8
Fostoria,O. S1
Kokomo,Ind. C16
LosAngeles D1
Newark,N.J. I-1
Palmer,Mass. W12
Portsmouth,O. D2
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. T6
Worcester,Mass. W20

Tape Filler Wire

Bartonville,Ill. K4
Cortland,N.Y. W11
Worcester,Mass. T6
Worcester,Mass. W20

TEXTILE WIRES

Card Wire

Holyoke,Mass. P18
Newark,N.J. I-1
Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Dent Spacer Wire

Buffalo W12
Cortland,N.Y. W11
Fostoria,O. S1
Newark,N.J. I-1
Worcester,Mass. A7
Worcester,Mass. W20

Reed Wire

Buffalo M3
Newark,N.J. I-1
Worcester,Mass. A7
Worcester,Mass. T6

Ring Traveller Wire

Buffalo M3
Cleveland A7
Fostoria,O. S1
Holyoke,Mass. P18
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Steel Heddle Wire

Cleveland A7
Cortland,N.Y. W11
Holyoke,Mass. P18
Millbury,Mass. N6
Roebling,N.J. R5
Waukegan,Ill. A7
Worcester,Mass. A7
Worcester,Mass. J4
Worcester,Mass. T6
Worcester,Mass. W20

Twin Heddle Wire

Cortland,N.Y. W11
Holyoke,Mass. P18

WIRE ROPE

Production men specify Roebling Preformed for longer life . . . lower costs

FOR EASY HANDLING, extra toughness and service life, there's nothing like Roebling Preformed "Blue Center" Steel Wire Rope. "Blue Center" steel—made only by Roebling—gives rope top resistance to abrasion and fatigue. And Roebling Preforming gives you a rope that spools better . . . doesn't tend to set or kink . . . minimizes vibration and whipping.

There is a Roebling wire rope of the right construction, grade and size for every type and make of rope-rigged equipment. Have your Roebling Field Man help choose the rope that will give you the best, low-cost performance. Further savings may be effected by following his suggestions on installation, use and maintenance of wire rope. John A. Roebling's Sons Company, Trenton 2, N. J.

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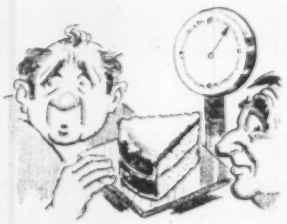
Windows of Washington

By E. C. KREUTZBERG Washington Editor, STEEL

Congress Tells Off FTC

Small Business To Get More?



Bureau of Standards Birthday

Federal Employees Grow

SELDOM is a government agency criticized as sharply by Congress as in the recent report of the Senate Committee on Interstate & Foreign Commerce. It really flays the Federal Trade Commission. When Woodrow Wilson called on Congress in 1914 to authorize creation of the commission, he said, "The business of the country awaits, has long awaited, and has suffered because it could not obtain further and more explicit legislative definition of the policy and meaning of the existing antitrust law. Nothing hampers business like uncertainty. . . ."

FTC, says the report, has added to confusions; it has failed to clear them up; businessmen, after 36 years of FTC administration, still need something more than assurance of "the menace of legal process."

The report deals with the freight absorption bill passed by the 81st Congress and vetoed by President Truman. The veto message expressed approval of the right to absorb freight and expressed the belief that clarification of this right could be expected from FTC.

Clarification—No! Efforts of the committee to obtain such clarification got nowhere. The committee is especially critical of FTC's failure to act on compliance reports received over two years ago from defendants in the cement case. "The court," says the report, "had ordered the reports to be filed with the commission; if the reports were not satisfactory, the commission could, and should, have so advised the court, as well as the businessmen involved."

Since FTC will not clarify the right of freight absorption, says the committee, it is up to Congress to legislate. Sponsors of freight absorption are hoping to come up with a bill that will not be vetoed after it has been passed by both houses.

15 Per Cent Higher?

Will the defense procurement agencies again be authorized, as in World War II, to pay up to 15 per cent higher to "small business" than the prices quoted on the same goods by large corporations? That question is under consideration by Sen. John Sparkman (Dem., Ala.) and Rep. Wright Patman (Dem., Texas), sponsors of a bill to establish a Small Defense Plants Corp. It would be the counterpart of the Smaller War Plants Corp. of World War II. The bill, now before the two Banking & Currency Committees, is intended to "assure small business, the bulwark of our free competitive system, a full share in our mobilized economy." The subsidy provision, if the two authors agree on it, is to be incorporated in a revised version of the original draft.

50 Years of 'Standards' . . .

To help the National Bureau of Standards celebrate its 50th birthday, 25 leading scientific and technical societies will hold their 1951 conventions in Washington, headquartering at the bureau. The calendar for these meetings can be obtained from the bureau's Division of Information. When it was founded in 1901 the bureau was charged simply with jurisdiction over weights and measures.

The scope of its work today is indicated by the names of its 15 divisions: Electricity, mechanics, organic and fibrous materials, heat and power, atomic and radiation physics, chemistry, optics and meterology, metallurgy, mineral products, building technology, applied mathematics, electronics, ordnance development, radio propagation and missile development.

Bigger and Bigger . . .

Federal employment is not yet up to the level that will be required before the end of 1951 to man the defense agencies—but it's moving up rapidly. Reports to the Byrd committee show that names on the federal payroll moved up in November for the fifth consecutive month. The names numbered 2,163,278 at end of November, a gain of 32,827 over October. These figures cover civilian employees only and do not include men and women in uniform.

Double Pricing Wins Test . . .

The U. S. Supreme Court last Monday agreed with Federal Trade Commissioner Lowell B. Mason in a double pricing dispute involving the FTC and Standard Oil Co. of Indiana.

FTC ruled in August, 1946, that Standard must discontinue selling gasoline to four large Detroit jobbers at 1½ cents a gallon less than it charged retail service stations. Mr. Mason dissented in that opinion, reasoning that a business firm can sell its goods at a lower price to one customer than it does to another if it is acting in good faith to meet competition.

The high court on Jan. 8 followed the same line of argument in reversing the FTC order. Part of Standard's case rested on the fact that its lower price to jobbers was made to retain them as customers to meet an equally low price of a competitor.

Subsidy Deals Being Arranged...

Subsidy deals to get increased production of critical and strategic minerals are being arranged by the government. General Services Administration, the responsible agency, refuses to divulge details because of secrecy requirements under the Stockpiling Act. It is known, though, that one of the contracts already negotiated calls for construction of a plant at Las Vegas, Nev., to concentrate manganese ore from the nearby Three Kids mine and that the price to be paid for 45 per cent concentrate is $1.50 a unit at Las Vegas for contained manganese. Under study by GSA are proposals to reactivate the Nicare nickel property near Oriente, Cuba.

Yes! we build illet Mills

JONES & LAUGHLINS, LTD.	Pittsburgh, Pa.	1892
CARNEGIE STEEL CO.	Duquesne, Pa.	1897
CARNEGIE STEEL CO.	Duquesne, Pa.	1900
NATIONAL STEEL CO.	Youngstown, Ohio	1900
SHARON STEEL CO.	Sharon, Pa.	1901
GRAND CROSSING TACK CO.	Chicago, Ill.	1901
DOMINION IRON & STEEL CO.	Sydney, N. S.	1903
YOUNGSTOWN SHEET & TUBE CO.	Youngstown, Ohio	1905
LACKAWANNA STEEL CO.*	Buffalo, N. Y.	1906
INDIANA STEEL CO.	Gary, Ind.	1907
INDIANA STEEL CO.	Gary, Ind.	1907
PITTSBURGH STEEL CO.	Monessen, Pa.	1908
JONES & LAUGHLINS, LTD.	Aliquippa, Pa.	1909
JONES & LAUGHLIN STEEL CO.*	Aliquippa, Pa.	1909
CAMBRIA STEEL CO.*	Johnstown, Pa.	1909
REPUBLIC IRON & STEEL CO.	Youngstown, Ohio	1910
REPUBLIC IRON & STEEL CO.*	Youngstown, Ohio	1910
ATLANTA STEEL CO.	Atlanta, Ga.	1912
STEEL CO. OF CANADA*	Hamilton, Ont.	1912
BETHLEHEM STEEL COMPANY	Bethlehem, Pa.	1913
RIVER FURNACE COMPANY	Cleveland, Ohio	1913
RIVER FURNACE COMPANY*	Cleveland, Ohio	1913
UNITED STEEL CO.*	Canton, Ohio	1915
STEEL, PEECH & TOZER, LTD.	Rotherham, England	1916
DONNER STEEL COMPANY	Buffalo, N. Y.	1916
BETHLEHEM STEEL COMPANY	Sparrows Point, Md.	1917
BETHLEHEM STEEL COMPANY*	Sparrows Point, Md.	1917
TRUMBULL STEEL COMPANY	Warren, Ohio	1917
STEEL, PEECH & TOZER, LTD.	Sheffield, England	1917
TATA IRON & STEEL COMPANY	Sakchi, India	1917
TATA IRON & STEEL COMPANY*	Sakchi, India	1917
WICKWIRE STEEL COMPANY	Buffalo, N. Y.	1917
TRUMBULL STEEL COMPANY	Warren, Ohio	1918
WEIRTON STEEL COMPANY	Weirton, W. Va.	1919
WEIRTON STEEL COMPANY*	Weirton, W. Va.	1919
WHITAKER-GLESSNER COMPANY*	Portsmouth, Ohio	1919
ACIERIES DE LONGWY	Mont-St. Martin, France	1919
ACIERIES DE LONGWY*	Mont-St. Martin, France	1919
HOMECOURT, FORGES & ACIERIES	Homecourt, France	1919
HOMECOURT, FORGES & ACIERIES*	Homecourt, France	1919
DENAIN & ANZIN	Denain, France	1920
DENAIN & ANZIN*	Denain, France	1920
BROKEN HILL PROPRIETARY CO.*	Newcastle, Australia	1920
INLAND STEEL COMPANY***	Indiana Harbor, Ind.	1922
FORD MOTOR COMPANY	River Rouge, Mich.	1922
REPUBLIC IRON & STEEL CO.	Youngstown, Ohio	1923
REPUBLIC IRON & STEEL CO.**	Youngstown, Ohio	1923
YOUNGSTOWN SHEET & TUBE COMPANY	Youngstown, Ohio	1923
TENNESSEE COAL, IRON & R.R. CO.*	Birmingham, Ala.	1924
FORD MOTOR COMPANY*	River Rouge, Mich.	1925
INLAND STEEL COMPANY*	Indiana Harbor, Ind.	1925
AMERICAN STEEL & WIRE CO.	Worcester, Mass.	1926
INTERSTATE IRON & STEEL CO.	Chicago, Ill.	1927
JOHN A. ROEBLING'S SONS CO.	Trenton, N. J.	1927
SHEFFIELD STEEL CORPORATION	Kansas City, Mo.	1928
YOUNGSTOWN SHEET & TUBE CO.***	Indiana Harbor, Ind.	1929
FRIEDRICH KRUPP, A. G.***	Rheinhausen, Germany	1929
FRIEDRICH KRUPP, A. G.*	Rheinhausen, Germany	1929
BRITISH (G. K. B.) IRON & STEEL CO.*	Cardiff, Wales	1934
AUSTRALIAN IRON & STEEL, LTD.*	Port Kembla, Australia	1936
YOUNGSTOWN SHEET & TUBE CO.***	Youngstown, Ohio	1940
BETHLEHEM STEEL CO.	Lackawanna, N. Y.	1945
JOHN LYSAGHT, LTD.*	Scunthorpe, England	1947
OESTERREICHISCHE ALPINE MONTANGESELLSCHAFT	Leoben-Donawitz, Austria	1949
CONSETT IRON COMPANY, LTD.***	Consett, England	1950

*Mill also rolls sheet bar

**Mill also rolls sheet bar and skelp

***Mill also rolls slabs

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RM-34

GE's Jet Engine Plant

Lockland, O., will be the location of a test, development and research center

A TEST, development and production center to meet the increased military need for jet and turbo-prop engines is being established by General Electric Co. at Lockland, O., near Cincinnati. The program will more than triple the space now occupied in the plant. The expansion is being carried out through purchase of one building and the lease of another from Electric Auto-Lite Co., both part of the original Lockland facility and the purchase of an adjoining plot of land and construction of a two-story office and factory building.

Jet engine components will be made at Lockland. In the past, the company has not manufactured parts at this plant. It has assembled the engines from components supplied by over 280 subcontractors. GE's own components manufacturing facilities at Lynn and Everett, Mass., will be augmented by the new Ohio facilities.

Facilities to assemble engines are being expanded; space for development and engineering, commercial and executive staffs will be included. Negotiations also are underway for lease of additional unused space in the plant, to include at least part of three government-owned foundry buildings. Purchased, leased and to-be-constructed facilities at Lockland will have a total of 2,070,000 square feet of floor area.

Douglas Reopens Tulsa Plant

Douglas Aircraft Co., Santa Monica, Calif., is to reopen its Tulsa, Okla., plant for the production of swept-wing, six-jet, Boeing B-47 Stratojet bombers. According to Donald W. Douglas, company president, production will begin at the government-owned plant when the present occupant, the U. S. Corps of Engineers, moves.

Parker Appliance Expands

Expansion of facilities for reducing its $6 million backlog of aircraft and industrial requirements are underway at Parker Appliance Co., Cleveland. A former subcontractor, Eaton Screw Products Co., Eaton, O., was purchased for the manufacture of steel tube fittings for industrial hydraulic use.

Production of aircraft fittings and valves at the company's Los Angeles plant is being expanded; subcontracting is also boosting this plant's capacity. The Cleveland Valve Division is taking over space previously leased to Thompson Aircraft Products Inc., Cleveland. Another step in the program is creation of Synthetic Rubber Products Co. in Los Angeles for manufacture of molded rubber parts and O-rings. The new facility substantially duplicates the Cleveland plant devoted to making those products.

P & W Licenses Chrysler

Under a license granted by Pratt & Whitney Aircraft Division, United Aircraft Corp., East Hartford, Conn., Chrysler Corp., Detroit, is to manufacture the J-48 Turbo-Wasp jet engine for the military service. It will be built in a plant to be constructed near Detroit.

Carrier Builds for Defense

Carrier Corp., Syracuse, N. Y., will build a $3,250,000 plant to manufacture an undisclosed type of product for the national defense program. The 217,000-square foot plant will be ready for operation by early spring and was originally planned for manufacture of lighter types of air conditioning equipment.

Blaw-Knox Division Expands

Lewis Foundry & Machine Division, Blaw-Knox Co., Pittsburgh, is undertaking an expansion and modernization program to increase the output of rolling mill machinery. The $1 million program will include plant changes, addition of new equipment to permit handling of heavier types of rolling mill machinery, and an increase in overall capacity.

California Firm Reorganizes

Diversified Metal Products Co. is new name of Machinery Mfg. Co., Los Angeles, now reorganized. Maintaining manufacturing facilities at 5125 Alcoa Ave., the company is developing several machine tools, production of which is scheduled to begin in February.

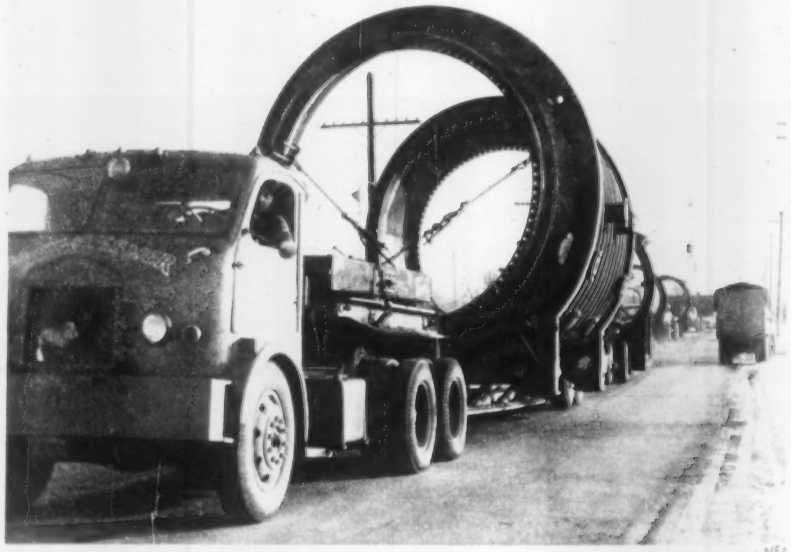
Ohio River Steel Starts Output

Full operations have been started by Ohio River Steel Corp. at the Toronto, O., plant once owned and operated by Follansbee Steel Corp. The facility has four open hearths with a rated capacity of 136,000 tons of ingots yearly.

The ingots are being shipped into conversion channels for sheet and strip production for automotive and other customers. In January, 1950, the plant was purchased from Follansbee by Kovalchick Industries Inc., Indiana, Pa., then resold to Ohio River Steel which since last fall has been rehabilitating the furnaces.

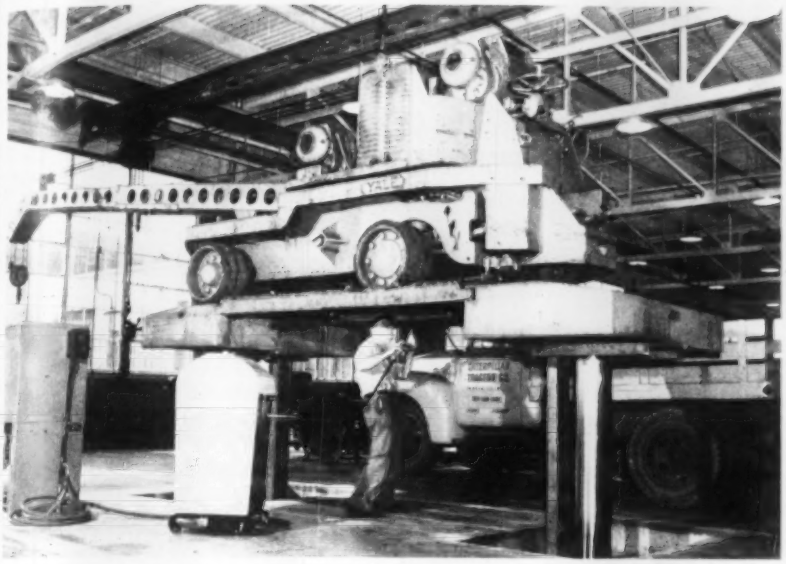
Stefco Steel Plant Sold

Cribben & Sexton Co., Chicago, manufacturer of kitchen ranges, will



NEA

ONLY THE HALF OF IT: This convoy of trucks loaded with the makings of one of twin altitude chambers for the National Advisory Committee for Aeronautics pulled into Cleveland after a four-day trip from Midland, Pa. Another convoy with the same equipment followed in a few days. The huge rings are for testing jets under simulated high-altitude conditions. They are part of the $13.5 million addition to NACA facilities



ROUND-THE-CLOCK MAINTENANCE: A 24-hour automotive repair shop was placed in operation at Caterpillar Tractor Co.'s Peoria, Ill., plant. It will service and maintain the company's many trucks, railroad cars and other material-handling and transportation vehicles in a round-the-clock operation. Over 100 are employed in the prevention and care of automotive infirmities. Caterpillar wants to be sure to keep its vehicles going smoothly through its 400-acre plant. Here, a boom crane gets a lubricating job by a mechanic

take over Stefco Steel Co., Michigan City, Ind., on Apr. 1. Working force of 140 will be unchanged when the plant is converted to defense production under a contract recently awarded the Chicago company.

Rust Builds Catalyst Plant

Rust Engineering Co., Pittsburgh, will build a catalyst plant for Bay Chemical Co., a division of Morton Salt Co., at Weeks, La. Product made is used in high octane gasoline catalytic cracking processes and is to be made by a process developed by Bay. Process design will be furnished by Rust Process Design Co., a Rust subsidiary.

Merger Plans Abandoned

Proposed merger of Carborundum Co., Niagara Falls, N. Y., and Minnesota Mining & Mfg. Co., St. Paul, Minn., has been abandoned. Carborundum instead will institute a program of diversification and plant modernization.

Company's intention is to enter other fields with products that would be in demand during lean periods for heavy industry; the proposed merger appeared to be the answer to this objective. Program ahead is a continuation of the modernization on which Carborundum has spent $20 million since the end of the war.

Square D Expands, Builds

A $500,000 addition to its main plant in Milwaukee and another facility under construction in San Francisco, along with plans to establish factories in Dallas, Tex., and another in the East, are expansion developments reported by Square D Co., Detroit. Completion of the main plant addition is expected early this year. Company also has sold its Kollsman Instrument Division, located in Elmhurst, N. Y.

To Feed Appliance Plant

Functioning as a feeder operation for the main Appliance Division plant at Mansfield, O., will be a recently acquired plant of Westinghouse Electric Corp., at Newark, O. Purchased from Pharis Tire & Rubber Co., Newark, the plant will require 300 or more employees. It will be equipped to manufacture transmission units for automatic washers. Westinghouse also bought three acres of land.

1951 Cladmetal Uses To Advance

The cladmetal industry looks to 1951 for maximum use of its product in manufacture of some jet engine and guided missile parts, plus further development of fabricating techniques in domestic appliances, says Joseph Kenney, president of the American Cladmetal Company, Carnegie, Pa.

American Cladmetal claims that Rosslyn, its stainless steel-copper bonded product, enables a saving of fifty per cent on critical nickel and chromium in the engine field. Work in the domestic field will reach such items as locomotive parts, oil burners, bearings, food processing and cooking equipment.

Inflation Hikes Defense Costs

A good measure of inflation in the period June 25 (when the Korean war began) to Dec. 1 appears in the transcript of the Senate Appropriations committee in connection with the $20 billion supplemental military appropriation.

In that period Navy buying prices on typical items of procurement rose as follows: Tires 38.3 per cent; wire rope 100 per cent; smoke shells 55.8 per cent; Bailey bridges 37 per cent; height finders 38.9 per cent; wool serge 39.8 per cent; parachutes 51.7 per cent.

Industrial Expansion

Up in 1950, it is expected to go to an even higher level this year

BUSINESS will spend a record $21.9 billion for new plant and equipment in 1951. This is one-fifth greater than the 1950 outlays and one-seventh above the 1948 peak. The estimates are based on a joint Department of Commerce-Securities & Exchange Commission report.

Manufacturers will account for about two-thirds of the planned increases in expenditures. They will add $10.6 billion to facilities this year, or $2.6 billion more than they spent in 1950.

Iron and steel companies will double their expansion outlays. Substantial increases also will be made by the chemical industry, railroads, mining and transportation companies and utilities.

Upswing Goes On—Substantiating the findings of the Commerce-SEC report is R. D. Wood, president of the American Institute of Steel Construction.

He predicts an upswing in construction of war production facilities, provided scarce building materials are allocated for these projects.

Mr. Wood says fabricating companies now have enough orders to keep the industry busy for 7 or 8 months if steel is made available. Fabricators could use 3 million tons in 1951, as compared with less than 2 million tons in 1950.

1892 INDUSTRY AND HYATT—PARTNERS IN MECHANICAL PROGRESS **1951**

Hyatt says "Thank you"

Together we've worked through fifty-eight busy and pleasant years—but the last one, thanks to you, was the greatest in Hyatt's history.

Seems as if all Hyatt users moved ahead with the big production parade in agriculture—textiles—petroleum—highways—automotive—railroads—aviation—steel—material handling and numerous other fields.

The resultant increased orders for Hyatt Roller Bearings, we deeply appreciate. And at the same time we are equally happy over the continued and ever-growing preference for Hyatt precision production and outstanding performance.

In anticipation of your future demands for like workmanship and service, we are constantly providing improvements in our product design, application and manufacturing facilities.

So with our fifty-ninth year ahead, we want all of our old friends, and new, to know Hyatt not for our "age" but for our "experience" as . . . the largest manufacturer of straight cylindrical roller bearings in the world.

HYATT BEARINGS DIVISION, GENERAL MOTORS CORPORATION
Harrison, N. J., Chicago, Detroit, Pittsburgh, Oakland, Calif.

HYATT ROLLER BEARINGS

By H. C. TUTTLE *Detroit Editor, STEEL*

Mirrors of Motordom

A war fuels diet for autos may force engine design changes to stomach the lower grade gasolines. Problems to be overcome include vapor locking and evaporation

DETROIT

WAR GASOLINE will mean auto engine design changes, the Society of Automotive Engineers was told last week at its annual meeting in Detroit.

The petroleum industry can produce wartime motor fuels with satisfactory antiknock qualities, but such fuels may have greater volatility. That gasoline will have to do for civilian autos if the military needs the most of better grades for reciprocating or turbine power plants.

Make Shift—Design changes, Socony-Vacuum Laboratories people say, should be aimed at overcoming engine operating difficulties that accompany use of fuels with lower vapor pressure characteristics. The difficulties would take the form of vapor locking, excessive fuel tank and carburetor evaporation loss and extended duration of warm-up. The engine design changes suggested involve reduction of carburetor float-bowl temperatures, use of cooler intake manifolds, hot-spot heat applications to accelerate warm-up, placing pressure caps on gasoline tanks and installing fuel pumps near or in fuel tanks.

A few of the SAE topics were of a highly military character, particularly those dealing with aircraft power plants and problems of diesel engine operation in —65 degree temperature.

Several papers dealt with the need for building greater stamina into automotive parts. Many more, however, come under the heading of "business-as-usual-if-possible" dissertations.

Aluminum Auto Bodies Ahead?

One SAE paper would attract wider interest if normalcy were ahead for the auto industry. It sums up the joint efforts of four companies in the production of an all-aluminum passenger car body, designed to use mass production techniques and tools with little modification. No freak or purely experimental design like that of General Motors' Le Sabre (STEEL Jan. 8, p. 39), this adventure in all-aluminum automobile body fabrication on a commercial basis might have been adopted soon if sufficient aluminum could have been obtained.

Engineering, fabrication and assembly of the car were discussed by C. J. Schmidt of Goodyear Aircraft Corp.; choice of aluminum alloys and gages was told by J. H. Dunn, Aluminum Co. of America; the spotwelding techniques were outlined by E. J. Zulinski of Progressive Welder Co.

Two Advantages—E. C. De Smet, Willys-Overland Motors Inc., says aluminum offers two major advantages for automobile bodies: Weight saving and improved resistance to corrosion. No serious difficulties are offered in the forming and processing of the light metal. As to cost, the metal's other advantages compensate for the higher cost of material and processing.

The body design selected for the experiment was a reasonably conventional coupe, mounted on a standard jeepster steel chassis to permit direct comparison between performance of the aluminum body and a similar one in steel. The complete coupe body, says Mr. De Smet, contained 287 pounds of aluminum. The addition of standard steel hardware items such as hinges, locks, handles and window regulators, which were used as a matter of expediency, brought the body-in-white weight to 312 pounds. A similar all-steel body would weigh 600 pounds. When the car was completed, gas tank filled and all appurtenances attached its weight was 2406 pounds, 11 per cent less than its steel counterpart would have weighed.

Low Gravity Center—Some of the notable advantages of the aluminum body, according to him, are: "The lighter body has lowered the center of gravity of the vehicle. The doors and deck lid are lighter and easier to handle. The corrosive-resistant properties of aluminum under the attack of the elements, the abrasive effect of road dirt and pebbles and the alkaline reaction of chemicals upon the highways will prove the superiority of this material throughout the life of the vehicle."

Two aluminum bodies were built to determine which alloy would be superior. The two alloys used were 4S and Alclad 24-S.

Trial and Error—A few structural parts in each body were made of 61S alloy. This material takes on high and uniform properties in heat treating, has good weldability and corrosion resistance and is slightly less costly than Alclad 24S, but it requires an aging operation to obtain the best properties in parts which go through forming operations.

In sheet gages, the aluminum body had to be comparable in rigidity and strength to one of steel. Furthermore stiffness of the panels was dictated by proper "feel", comparable to that of steel. To get this feel and avoid stiffeners on flat body panels, aluminum gages were about 41 per cent thicker than steel.

Joiner—Resistance spotwelding appears to be the most suitable method for economical and fast joining. Although portable equipment was not available for this experiment four portable welding guns with a variety of adaptors or jaw extensions would fit all sections involved. Development of such equipment was not warranted for this project, but the needs are understood and presumably would pose no problem.

The parts for the prototype bodies were formed in drop hammer dies. For quantity production, aluminum body panels and parts can be readily produced in conventional iron and steel forming dies. The die material should not be porous and should be polished to prevent scratching. Suitable lubricants are needed to en-

Auto Truck Output

U. S. and Canada

	1950	1949
January	609,882	445,092
February	505,593	443,734
March	610,678	543,711
April	585,705	569,728
May	732,161	508,101
June	897,856	623,689
July	746,771	604,351
August	842,304	678,092
September	760,808	657,073
October	795,918	601,021
November	633,678*	475,454
December	659,958*	384,318

Weekly Estimates

Week Ended	1950	1949
Dec. 16	169,480	86,226
Dec. 23	160,912	116,567
Dec. 30	135,229	113,026
	1951	1950
Jan. 6	100,337	116,768
Jan. 13	115,000	155,164

Estimates by Ward's Automotive Reports

* Preliminary.

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courage free flow of the material while forming. To form compound curves the material is displaced rather than stretched or drawn.

Plymouth Makes 1951 Debut

First of the 1951 Chrysler-built cars was introduced last week when the new Plymouth made its debut. Retaining the roominess and silhouette of previous models, the new model is distinguished by its grille, which is only slightly peaked in the center in contrast with the definite bow shape which has identified the car for several years previously. Three vertical members, two of which coincide with the bumper guards, also give it a new look.

Most of the body change is confined to the front part of the car. Redesigned hood and front fenders soften angular lines and also permit the driver to see the road nearer to the car. Better vision all around results from narrowing of the windshield pillars and extending the glass area in front and rear windows.

On the mechanical side a number of other changes have been made. Windshield wipers are electrically operated, thus are not subject to speed fluctuations or complete stoppage during rapid acceleration. No more slowing down until the window becomes clear.

Generator output has been raised to 45 amperes, up five, to provide greater capacity for accessories. Hand brake "T" control handle is positioned for greater accessibility. Retained is the six-cylinder 97-horsepower engine with 7 to 1 compression ratio, combination ignition-starter switch, automatic electric choke and safety-rim wheels.

GMC's 1951 ONE-HALF TON PICKUP TRUCK
. . . ventipanes for controlled ventilation

Trucks Get Color Conscious

Catch color names are not restricted to passenger cars this season. The 1951 light truck line of GMC Truck & Coach Division is endowed with what the division terms "show job" colors, having been picked up from the special paints on GMC trucks used for show purposes. These carry the names twilight blue, Miami sand, polar grey and mahogany brown.

Of much greater significance, are the beefed-up characteristics of the new trucks. Horsepower of the two engines used in this light-truck line has been increased by four, the 228 cubic inch engine now developing 100 horsepower at 3400 rpm while the 248 turns out 114 at 3600 rpm. Heavier axle rating is given to all models of the 280-22 through the 350-24 series. More powerful brakes are also featured. On the 100-22 model duo-servo brakes are installed. On other models in the light line the front brakes are enlarged and rear brakes now have twin hydraulic cylinders. Window ventipanes for controlled ventilation are also introduced in the new models.

Olds To Build Tank Guns

Oldsmobile will make high velocity tank guns for medium tanks. These probably will appear on the mediums which Chrysler will build in Newark, Del. The guns will be produced in a new building now under construction and originally intended for steel storage and plant engineering shops. The plant will have about 200,000 square feet of floor space and is scheduled for completion this spring.

About 200 workers will be used at the outset, but eventually about 1300 will be employed on the operation. Oldsmobile will fabricate the breech ring, breech block and tube. The other parts will be subcontracted.

More than 200 machine tools will be required. These will include turning and boring lathes, rifling and honing machines, milling and broaching machines and grinders. Some heat treating equipment will also be needed.

The Ordnance Corps has placed orders for over $3 billion worth of vehicles and parts since July 1, the Commanding General of the Ordnance Tank-Automotive Center in Detroit has announced. Nearly $1 billion of this total has been placed with small manufacturers and dealers directly while hundreds of other small businesses are acting as subcontractors, he said.

1951 PLYMOUTH FOUR-DOOR CRANBROOK SEDAN
. . . still retained: The silhouette of previous models

The Business Trend

We're travelling an economic path strikingly similar to that followed in early 1941, but there are important differences: Now we've higher prices and output

"INDUSTRIAL activity enters the new year at the highest level in history, and there is every indication that the present peak production pace will continue for some months. In those lines connected with defense, output is expected to advance still further."

Those words are about as true today as they were when they appeared in this economic trend department on Jan. 13, 1941.

Ten years ago STEEL's industrial production index stood at 115.7. For the week ended Jan. 6, 1951, it hit a preliminary 191 per cent of the 1936-1939 average. A decade ago steel ingot operations were at 95.5 per cent of theoretical capacity. Today they're more than 100 per cent of the potential, and the weekly capacity is now 1,928,721 tons compared with 1,618,313 tons ten years ago in 1941.

Car and truck production in the U. S. and Canada in the week ended Jan. 4, 1941, was 76,700. In this week ended Jan. 6, 1951, assemblies totaled 100,337.

Carloading Rise in 1950 . . .

Loadings of revenue freight on American railroads totaled 38,899,523 cars in 1950, says Association of American Railroads. That was 8.3 per cent more than in 1949 and 6.5 per cent more than the 36,357,854 cars loaded in 1940.

The average freight train achieved a record transportation output in 1950 equivalent to moving more than 20,000 tons of freight one mile in an hour. That was nearly 14 per cent above the peak output during World War II and almost three times as much as it was 30 years ago.

Estimated net income of Class I railroads in November, 1950, after interest and rentals, amounted to $86 million compared with $54 million in the same 1949 month. Net income for the first 11 months of 1950 was estimated at $662 million compared with $352 million in the corresponding period of 1949.

Corporate Formations Slip . . .

Fewer new businesses were incorporated last November than at any time since September, 1945, immediately following the close of World War II, says Dun & Bradstreet Inc. Corporate formations during November totaled 6256, 7.8 per cent less than the October figure of 6782 and a drop of 7.4 per cent from the 6755 recorded in November, 1949.

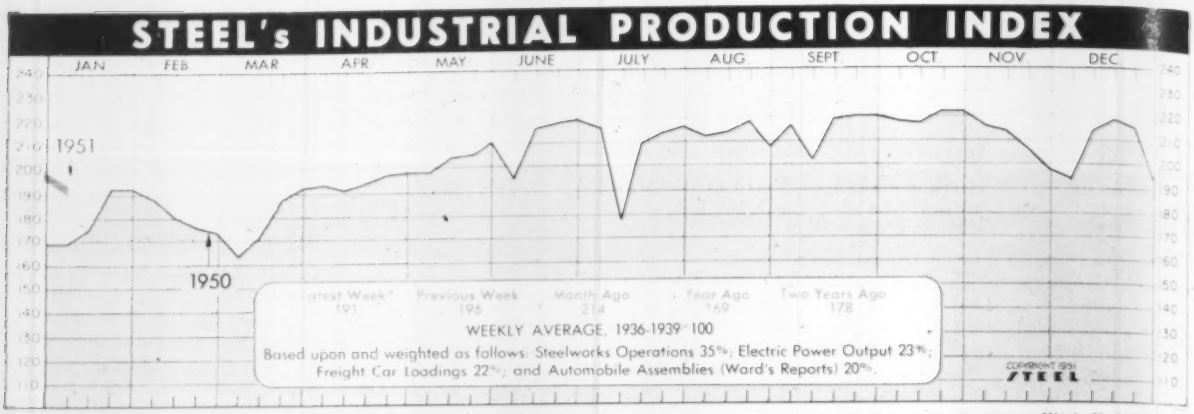
Stock corporations chartered during the first 11 months of 1950 reached 86,145. That was a gain of 11.0 per cent over 1949's figure of 77,634 for the same period, but it was a drop of 2.9 per cent from the 88,680 in the first 11 months of 1948 and 29.9 per cent less than the record number of 122,922 established in the comparable 1946 period.

Instalment Credit Down . . .

Consumer instalment credit outstanding declined $74 million in November to $13,319 million at the month end, the Federal Reserve Board estimates. The November de-

BAROMETERS of BUSINESS

		LATEST PERIOD*	PRIOR WEEK	MONTH AGO	YEAR AGO
INDUSTRY	Steel Ingot Output (per cent of capacity)†	101.0	98.0	101.0	93.5
	Electric Power Distributed (million kilowatt hours)	6,602	6,479	6,909	5,685
	Bituminous Coal Production (daily av.—1000 tons)	1,517	1,825	1,567	1,042
	Petroleum Production (daily av.—1000 bbl)	5,788	5,768	5,755	4,926
	Construction Volume (ENR—Unit $1,000,000)	$154.2	$111.2	$484.9	$323.4
	Automobile and Truck Output (Ward's—number units)	100,337	135,229	162,757	116,768
	*Dates on request. †1950 weekly capacity was 1,928,721 net tons. 1949 weekly capacity was 1,843,516 net tons.				
TRADE	Freight Car Loadings (unit—1000 cars)	620†	602	767	507
	Business Failures (Dun & Bradstreet, number)	144	125	176	161
	Money in Circulation (in millions of dollars)‡	$27,685	$27,916	$27,759	$27,551
	Department Store Sales (changes from like wk. a yr. ago.)‡	+21%	+17%	+19%	−3%
	†Preliminary. ‡Federal Reserve Board.				
FINANCE	Bank Clearings (Dun & Bradstreet—millions)	$17,893	$14,486	$17,679	$14,292
	Federal Gross Debt (billions)	$256.2	$256.7	$257.0	$256.9
	Bond Volume, NYSE (millions)	$20.9	$22.8	$25.3	$28.7
	Stocks Sales, NYSE (thousands of shares)	14,351	14,128	11,813	9,039
	Loans and Investments (billions)†	$71.8	$71.4	$69.9	$67.0
	United States Gov't. Obligations Held (millions)†	$33,719	$33,854	$32,984	$37,469
	†Member banks, Federal Reserve System.				
PRICES	STEEL's Weighted Finished Steel Price Index††	167.89	167.89	167.76	156.13
	STEEL's Nonferrous Metal Price Index‡	248.1	246.9	242.2	161.5
	All Commodities†	176.7	176.0	172.7	151.1
	Metals and Metal Products†	187.4	184.1	183.3	167.7
	†Bureau of Labor Statistics Index, 1926=100. ‡1936-1939=100. ††1935-1939=100.				


STEEL's INDUSTRIAL PRODUCTION INDEX
JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC
1951
1950
Latest Week* 191
Previous Week 196
Month Ago 214
Year Ago 169
Two Years Ago 178
WEEKLY AVERAGE, 1936-1939=100
Based upon and weighted as follows: Steelworks Operations 35%; Electric Power Output 23%; Freight Car Loadings 22%; and Automobile Assemblies (Ward's Reports) 20%.
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* Week Ended Jan. 6

crease compared with increases of over $300 million in each month from May through September, 1950.

Outstanding instalment credit usually expands seasonally in November. Most of the decline in the month is attributable to a drop in automobile sale credit. Instalment sale credit for the purchase of other durable consumer goods and instalment loans also contracted slightly.

An $85 million increase in noninstalment consumer credit offset the decline in instalment credit, and total outstanding consumer credit at the end of November was estimated at $19,412 million, about the same as a month earlier.

Charge account balances outstanding increased only $36 million in November compared with an average rise of more than $200 million during that month in preceding postwar years.

Employment Declines . . .

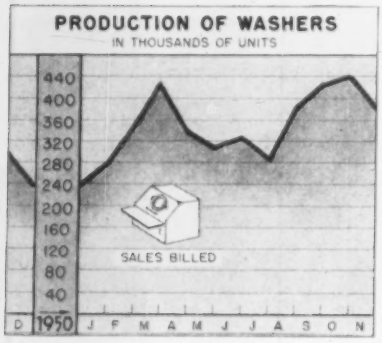
Overall U.S. employment declined by about 1 million workers in the month ended Dec. 9, the Commerce Department reports.

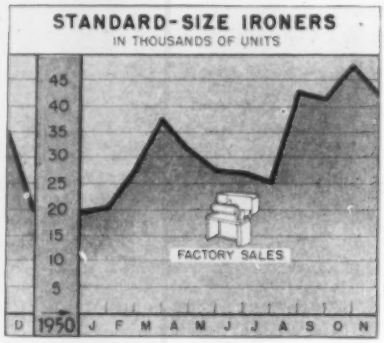
The drop to 60,308,000 is attributed to farm workers leaving the labor force at the end of the crop season. The Dec. 9 employment figure compares with total employment of 58,556,000 a year earlier. Nonagricultural employment rose from 53,721,000 in November to 54,075,000 in December. That reflects the usual pickup in nonfarm activity before the Christmas holidays.

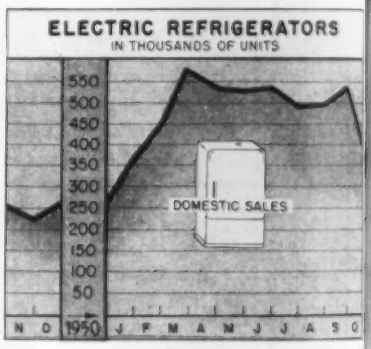
The number of unemployed workers remained about unchanged at 2,229,000 in the November-December comparison. A year ago there were 3,489,000 unemployed workers reported.

Wholesalers' Volume Up . . .

Sales of service and limited function wholesalers totaled $6871 million in November, says the Office of Busi-







Household Washers

Sales Billed—Units

	1950	1949	1948
Jan.	275,576	172,400	360,445
Feb.	342,967	201,300	367,999
Mar.	423,802	242,500	408,512
Apr.	333,072	192,500	402,257
May	304,640	211,700	377,895
June	325,217	260,700	392,496
July	282,261	200,900	326,181
Aug.	381,452	323,789	362,169
Sept.	424,043	357,281	433,919
Oct.	439,924	333,728	382,400
Nov.	379,964	298,717	319,300
Dec.	.....	237,591	183,700
Totals	.....	3,033,106	4,317,183

American Home Laundry Mfrs. Assoc.

Standard-Size Ironers

Factory Sales—Units

	1950	1949	1948
Jan.	26,300	28,300	40,192
Feb.	27,600	25,400	51,651
Mar.	37,800	23,800	53,686
Apr.	31,600	18,100	47,319
May	27,400	19,500	44,954
June	27,100	21,100	32,767
July	25,100	17,700	26,679
Aug.	42,700	32,300	35,203
Sept.	41,400	27,700	37,308
Oct.	47,500	36,045	38,517
Nov.	41,900	35,000	42,000
Dec.	.....	19,400	26,000
Totals	.....	307,345	476,860

American Home Laundry Mfrs. Assoc.

Electric Refrigerators

Domestic Sales—Units

	1950	1949	1948
Jan.	264,002	380,853	272,121
Feb.	450,751	337,424	281,580
Mar.	572,691	369,216	338,109
Apr.	531,498	324,370	330,720
May	528,506	330,753	317,763
June	534,489	296,199	373,115
July	490,802	315,444	351,094
Aug.	496,486	307,622	281,345
Sept.	512,125	309,429	344,260
Oct.	399,330	252,580	380,854
Nov.	.....	221,221	374,470
Dec.	.....	259,158	330,660

National Electrical Mfrs. Assoc.

ness Economics, Department of Commerce.

On a seasonally adjusted basis, total sales were slightly above the October level. The 3 per cent decline that occurred in the durable-goods groups was offset by a somewhat larger increase in sales of nondurable goods. November sales of wholesalers of durable and nondurable goods were $2455 and $4416 million respectively. All groups in the durable-goods category declined, except lumber and hardware, on a seasonally adjusted basis.

Inventories of service and limited-function wholesalers at the end of November are estimated at $8052 million. After adjustment for seasonal variations, those stocks were up $200 million from the October level. The entire increase occurred in durable-goods inventories.

Spending Survey Starts . . .

The Bureau of Labor Statistics is surveying family spending in 91 cities as a basis for revising the consumers' price index, widely used in metalworking wage agreements.

The survey takes on added importance because of the possibility that wage levels will soon be frozen in a formula that ties advances to upward swings in the index.

In the survey, more than 17,000 families chosen by lot will be interviewed between now and April. Each family will be asked to tell how much in goods and services it bought in 1950 and how much was spent.

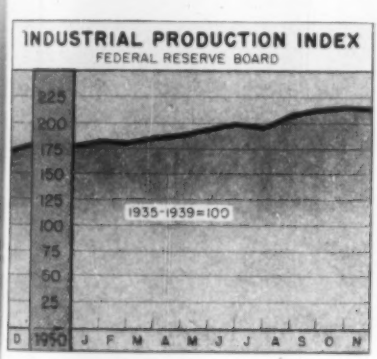
Retail food prices rose 1.2 per cent from Nov. 28 to Dec. 1 to a level only fractionally below the alltime high of July, 1948. The Bureau of Labor Statistics estimates the index on Dec. 15 to be 216.3 (1935-1939 100), 3.2 per cent above the previous month.

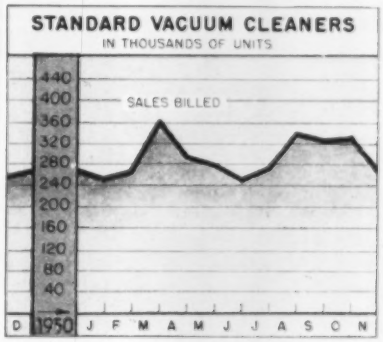
TV Shutdown by Summer?

Defense demands may cause a complete shutdown of manufacturing of television sets by summer, predicts H. A. Bell, president of Packard-Bell Corp., Los Angeles.

Issue Dates of Other FACTS and FIGURES Published by STEEL:

Construction Dec.25	Gear Sales Jan.8	Radio, TV Aug.14
Durable Goods Nov.27	Gray Iron Castings Jan.8	Ranges, Elec. Dec.4
Employ., Steel Dec.25	Machine Tools Nov.27	Ranges, Gas Dec.4
Fab. Structural Steel Jan.8	Malleable Cast. Dec.18	Steel Forgings Nov.20
Foundry Equip. Dec.18	Metalwkg. Employ. Jan.8	Steel Shipments Dec.25
Freight Cars Dec.18	Price Indexes Dec.11	Steel Castings Nov.20
Furnaces, Indus. ...Dec.18	Pumps, New Orders Jan.8	Wages, Metalwkg...Nov.27
Furnaces, W. Air...Dec.25	Purchasing Power ..Dec.11	Water Heaters Dec.25





Industrial Production Index

	Total Production		Iron, Steel		Non-ferrous	
	1950	1949	1950	1949	1950	1949
Jan.	183	191	203	228	179	184
Feb.	181	189	201	232	188	185
Mar.	187	184	205	233	199	183
Apr.	190	179	222	219	196	168
May	195	174	226	204	195	145
June	199	169	231	177	207	132
July	196	161	228	156	202	128
Aug.	209	170	236	178	212	141
Sept.	212	174	245	179	218	157
Oct.	217	166	253	103	221	164
Nov.	215	173	246	144	224	163
Dec.	...	180	...	198	...	165
Avg.	...	176	...	187	...	160

Federal Reserve Board

Standard Vacuum Cleaners

Sales Billed—Units

	1950	1949	1948
Jan.	249,150	228,769	304,273
Feb.	263,515	241,267	311,448
Mar.	361,014	309,897	355,415
Apr.	292,664	252,656	306,588
May	278,645	222,850	276,657
June	250,190	207,354	256,071
July	279,967	161,920	229,537
Aug.	341,232	219,909	237,202
Sept.	327,524	250,036	280,084
Oct.	331,445	272,520	281,573
Nov.	265,310	253,516	255,080
Dec.	.....	265,513	273,890
Total	.....	2,886,514	3,360,859

Vacuum Cleaner Manufacturers Assoc.

Packaging Time cut 60% with Angier VPI* Wrap

THEN
Slushing time was 15 minutes.

Photos courtesy Whitin Machine Works

NOW only 6 minutes are required to line box with Angier VPI Wrap. This revolutionary coated paper gives off vapor that stops rust. It eliminates slushing. "Degreasing" time saved per box — one hour. Total time saved per month — 460 hours. To simplify packaging of *your* metal products, send coupon today!

Angier CORPORATION
Framingham 8, Mass.

*T. M. Reg. U. S. Pat. Off. (Vapor Rust Preventive)

Industrial Packaging Manufacturers & Engineers Since 1895
Representatives & Distributors in Principal Cities

Angier Corp., Framingham 8, Mass.
Yes Send VPI Facts! I am interested in rust control of:

( ) Machinery - Industrial, Metal Working, Farm, Office, Construction.
( ) Steel in process of fabrication.
( ) Electrical Machinery, Appliances, Products.
( ) Instruments and clocks.
( ) Fabricated Products—Cutlery, Hardware, etc.
( ) Ordnance Equipment.
( ) Transportation Equipment—Aircraft, Auto, Naval, Railroad, etc.
( ) Others:

(USE MARGIN for name, title, firm, address)

Is PHYSICAL STRENGTH your magnet problem?

Mills agree that skull-cracking subjects a magnet to the roughest of service. Cautioning crane operators to "take it easy" is sage but frequently impractical advice.

Why not fit your magnet to the job when you buy?

Ohio *basket-type* magnets are specially constructed to withstand hard knocks. "Fenders" project beyond magnet diameter . . . stave off and protect against damaging blows.

For extra magnet life in rough service, install Ohio *basket-type* magnets. Write today to Ohio—25 years a leader in *magnetic materials handling.*

Use "basket" construction for rough service

OHIO PROTECTO-WELD MAGNET is welded *on top*, where weld cannot be dented in. Sizes include 39, 46, 55 and 65-inch diameters. Ohio also builds magnet control equipment.

THE OHIO ELECTRIC MFG. CO. • 5900 MAURICE AVENUE • CLEVELAND 4, OHIO

Ohio MAGNETS

A-2039

Men of Industry

JOHN M. YAHRES
. . . president, Pittsburgh Screw & Bolt

ROBERT W. SNOWDON
. . . New Brighton plant mgr., Heppenstall

J. B. COWAN
. . . exec. V. P., Plasteel Products

John M. Yahres, executive vice president, was elected president of **Pittsburgh Screw & Bolt Corp.,** Pittsburgh, succeeding the late **John P. Hoelzel.**

Koppers Co. Inc., Pittsburgh, appointed **Gordon Fox, Harry Naismith** and **W. B. Clemmitt** divisional vice presidents in its engineering and construction division. Now a department of that division is the former subsidiary, Freyn Engineering Co., activities of which are under the direction of **W. C. Snyder Jr.,** vice president and manager of the division's metallurgical department. The Freyn department continues offices in Chicago. Mr. Fox was executive vice president of Freyn Engineering, Mr. Clemmitt a vice president, and Mr. Naismith was vice president, Open Hearth Combustion Co., Freyn's subsidiary.

Giddings & Lewis Machine Tool Co., Fond du Lac, Wis., appointed **Edgar L. McFerren** chief engineer to succeed **K. F. Gallimore,** who continues as a director and vice president and consulting engineer. **Fred C. Freund** was appointed assistant works manager replacing Mr. McFerren as assistant to **W. E. Rutz,** executive vice president and works manager. **Ray G. Commo** was named supervisor of personnel and will head the industrial relations department.

Stacey Mfg. Co., Cincinnati, elected **E. J. Baechle** president to succeed the late **A. A. Ranshaw.** He has been secretary-treasurer and executive vice president and is succeeded in the latter position by **Thorpe Ranshaw.**

Robert W. Snowdon was appointed plant manager of the recently acquired New Brighton works of **Heppenstall Co.,** Pittsburgh.

Herbert Gordon was elected president, **Sterling Bolt Co.,** Chicago, to succeed **Charles C. Gordon,** now chairman of the board. **Harry Dorph,** with the company since its inception, has resigned but continues on the board. **Edgar B. Miller** continues as vice president and general manager, and **P. T. Phillips** was elected vice president and continues as secretary.

Frank Hallberg was appointed chief engineer, **Ross Operating Valve Co.,** Detroit. He was with Clinton Machine Co.

David W. Thomas was elected executive vice president and director, **Dumas Steel Corp.,** Pittsburgh, and subsidiaries. He resigned from Jones & Laughlin Steel Corp. where he was assistant general manager of sales.

Robert J. Heggie was appointed general manager of sales, **A. M. Castle & Co.,** Chicago, succeeding **E. E. Bates,** retired.

Midvale Co., Philadelphia, appointed **Samuel A. Ott** superintendent of melting, in charge of electric melting furnaces at Midvale as well as the open-hearth plant.

Sintercast Corp. of America, Yonkers, N. Y., appointed **Robert L. Pettibone** chief metallurgical engineer. A specialist in heat treatment of powder metal parts, Mr. Pettibone was research metallurgist at Sintercast.

Plasteel Products Co., Washington, Pa., promoted **J. B. Cowan** to executive vice president. He joined the company in 1945 as personnel manager and has been serving as plant manager.

American Air Filter Co. Inc., Louisville, appointed **John M. Kane** manager of its dust control division of which he has been chief engineer since 1944.

Edward Keating was elected vice president in charge of foreign operations of **Ekco Products Co.,** Chicago, and continues as assistant to the president. **John Brooks** was made vice president in charge of housewares sales, continuing as sales manager, and **Edward Marder,** another new vice president, continues in charge of expanded staple line management.

Elected vice presidents, **Fruehauf Trailer Co.,** Detroit, are **E. S. Quarngesser,** Baltimore, in charge of eastern sales division; **W. W. Siegrist,** Detroit, in charge of the truck body division; and **Harry R. Badger,** Detroit, in charge of scheduling.

William W. Prince was elected a member of the executive committee of **Baldwin - Lima - Hamilton Corp.,** Philadelphia, and **John D. Dickinson** was appointed assistant district manager, New York district office. **George H. Lynn** is general sales manager, Hamilton Division, Hamilton, O.

S. T. Mackenzie, head of the Philadelphia office of **Babcock & Wilcox Co.,** was appointed to the newly created post of sales manager. His

headquarters are in New York. **R. W. Buntin** becomes district sales manager at Philadelphia.

Richard L. Mullen was elected vice

RICHARD L. MULLEN
. . . V. P. Lehigh Structural Steel

president, **Lehigh Structural Steel Co.**, Allentown, Pa. He is also a member of the board of directors.

Edward J. Lilly was appointed sales engineer, Butterfield Division, **Union Twist Drill Co.** He represents the division in Philadelphia and Baltimore with headquarters in Philadelphia.

Vernon W. Kraetsch was appointed assistant comptroller, **American Steel & Wire Co.**, Cleveland, subsidiary, U. S. Steel Corp. Appointments at its Donora Steel & Wire Works, Donora, Pa., include: **Oliver W. Truax Jr.**, appointed superintendent of industrial relations to succeed **E. Soles**, retired. **Howard C. Boardman** succeeds Mr. Truax as labor relations supervisor. **J. C. Witherspoon** becomes assistant to **Harold Cope**, general superintendent of the plant, and is succeeded by **Kenneth C. Shearer** as division superintendent, open hearth.

Pickands, Mather & Co., Cleveland, announces that **Henri P. Junod** and **Elmer C. Brunner** have been admitted to the firm.

Robert J. Russell was appointed sales manager, **Hardinge Co. Inc.**, York, Pa. Previously chief of the technical staff, he also is secretary of the company.

Appointed to direct manufacture of F-84 thunder jet fighter planes at the **Buick-Oldsmobile-Pontiac Assembly Division** plants of General Motors Corp. in Kansas City, Kans., are: **Edward D. Rollert**, manager of the new GM aircraft program; **M. H. Boden**, assistant manager; **Wallace E. Wilson**, chief engineer; and **John Q. Holmes**, master mechanic.

Ab Martin was appointed manager, Ft. Wayne, Ind., Works, apparatus department, **General Electric Co.**, to succeed **C. H. Matson**, named manufacturing consultant of the company's small apparatus divisions staff.

Frank J. Thompson was appointed purchasing director, **L. J. Mueller Furnace Co.**, Milwaukee. He was with Harnischfeger Corp.

Alfred F. Podesta was appointed sales manager, Atlantic branch, metal division, **National Lead Co.**, New York.

Jones & Laughlin Steel Corp., Pittsburgh, announces changes as follows: **J. E. Timberlake**, assistant general

J. E. TIMBERLAKE
. . . J&L general manager of sales

manager of sales, was appointed general manager of sales. **H. E. Robinson**, manager of sales-strip and sheet products, appointed assistant general manager of sales. **C. M. Merritt**, district sales manager at Detroit, appointed assistant general manager of sales. **L. T. Willison**, manager of sales-cold finished products, appointed manager of sales-strip and sheet products. **H. M. Knobloch**, Indianapolis district sales manager, appointed manager of sales-cold finished products. **L. C. Berkey**, Chicago district sales manager, appointed Detroit district sales manager. **I. A. Mlodoch**, Chicago sales office, appointed district sales manager there. **G. G. Marshall**, Buffalo assistant district sales manager, appointed district sales manager at Indianapolis. **Roy M. Laning**, Detroit sales office, appointed Detroit assistant district sales manager.

Wheeling Steel Corp., Wheeling, W. Va., elected **Joseph H. Woodward II** a member of the board to succeed his father, the late **Alan H. Woodward.**

Robert H. Daisley, Eaton Mfg. Co., Cleveland, is the new president of the Detroit association, **Automotive & Aviation Parts Manufacturers Inc.**

George W. Starr, original vice president-sales, **Ohio Ferro-Alloys Corp.**, Canton, O., until his semi-retirement in 1947, has now ceased all business activity and is residing at 141 High St., Canfield, O.

Ernest R. Schmidt and **Raymond F. Littley** were elected vice presidents of **Budd Co.**, Philadelphia. Mr. Schmidt is in charge of manufacturing to succeed **Warren H. Farr**, who resigned but continues as a director. Mr. Littley is in charge of sales, automotive products.

Howard H. Blouch joined **Chromium Corp. of America**, Cleveland, as sales manager, Cleveland plant. He was with Heil Process Equipment Corp.

John T. Kiley, executive vice president, **James Flett Organization Inc.**, Chicago, becomes president to succeed **James Flett**, founder of the company, now chairman of the board.

Paul M. Arnall succeeds **Frank P. Rhame**, resigned, as president and general manager, **Lunkenheimer Co.**, Cincinnati.

Burton W. Lang was appointed vice president, **AP Parts Corp.**, Toledo, O. He continues as director of purchas-

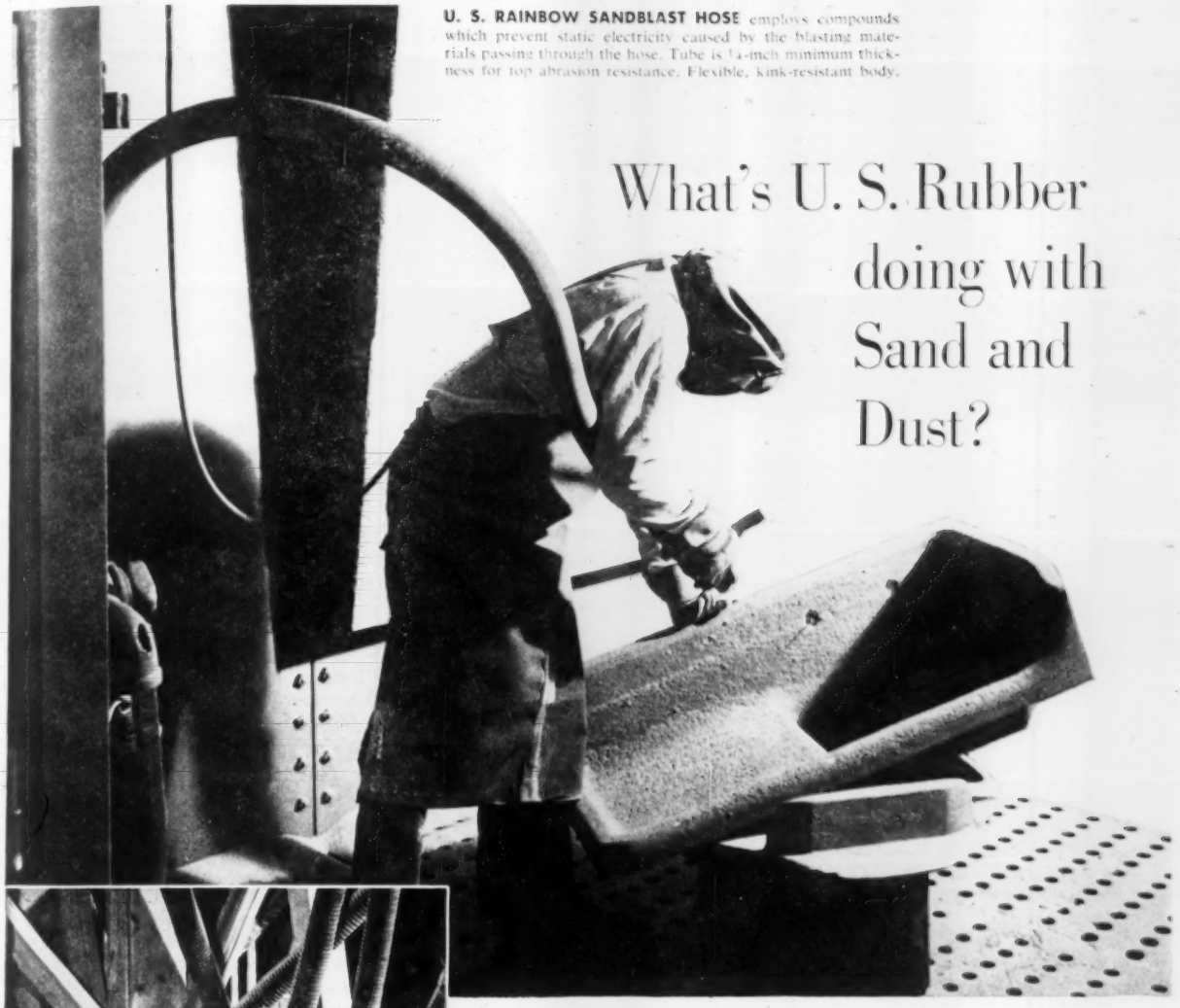
BURTON W. LANG
. . . AP Parts Corp. V. P.

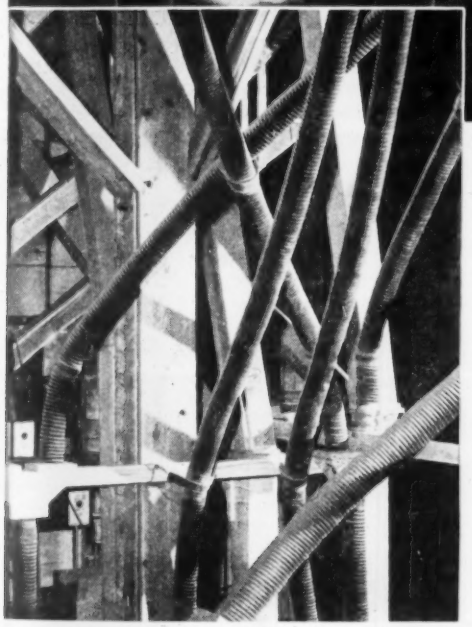
ing and engineering and also continues supervision, excluding sales, of the Miracle Power Division.

Carl Brooks, eastern manager of **Gen-**

U. S. RAINBOW SANDBLAST HOSE employs compounds which prevent static electricity caused by the blasting materials passing through the hose. Tube is ¼-inch minimum thickness for top abrasion resistance. Flexible, kink-resistant body.

What's U. S. Rubber doing with Sand and Dust?





U. S. DUST CONVEYING HOSE will withstand the severe action of various abrasive particles conveyed through blower or suction systems. Exceptionally light and flexible. Resistant to fumes and moisture.

"U. S." technicians are constantly developing new types of hose to meet new specifications, new conditions in conveying sand and dust.

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. . . industrial products at Vickers

FRANK A. STROUCE
. . . Bethlehem mgr., fabricated steel construction

FRANK R. BARNAKO
. . . mgr. of compensation-safety, Bethlehem

eral Dry Batteries Inc., Cleveland, was named general sales manager.

E. O. Clark was promoted to industrial products sales manager for **Vickers Inc.** and has moved to Detroit to assume these new duties. He has been district manager with offices in Worcester, Mass., for the last ten years, and is succeeded there by **J. C. Carpenter.**

Ray E. Kalmbach was named general manager, **Wilson Foundry & Machine Co.,** Pontiac, Mich., a subsidiary of Willys-Overland Motors Inc. **William A. Hambley** was appointed sales manager.

John P. McLean was appointed manager, Buffalo district sales office, **Republic Steel Corp.,** to succeed **C. A. Cherry,** resigned.

Kenneth M. Allen was elected a director of **Rockford Machine Tool Co.,** Rockford, Ill.

John A. Moreland Jr., formerly with Wadell Equipment Co., Garwood, N. J., was appointed manager, automotive sales division, **Hunt-Spiller Mfg. Corp.,** Boston. He succeeds **Gordon L. Leach,** resigned.

Frank A. Strouce was appointed general manager, fabricated steel construction, **Bethlehem Steel Co.,** Bethlehem, Pa., to succeed the late **E. J. Paulus,** and **Walter E. LaBelle** was appointed assistant general manager. **Frank R. Barnako** succeeds **Walter F. Ames,** retired, as manager of compensation and safety.

Edward D. Dessiston was appointed general manager, **Crossman Arms Co.,** Rochester, N. Y. **Charles Meng** was named production manager.

Charles S. DeMuth, assistant treasurer and manager of sales, **Lyon, Conklin & Co. Inc.,** Baltimore, and associated with the company 59 years, has retired.

Leon S. Kuhn is the new manager of sales for **Bethlehem Pacific Coast Steel Corp.'s** Portland, Oreg., district.

Charles G. Eschenbach was appointed assistant director of personnel, **Chrysler Corp.,** Detroit, to succeed the late **C. B. Cornell.**

J. E. Vaughn was elected vice president in charge of sales, **Standard Railway Equipment Mfg. Co.,** Hammond, Ind., with jurisdiction over all sales in the United States and Canada. **S. L. Beymer** was elected vice president and executive assistant to the president.

E. Preston Calvert was appointed director of public relations, **Pullman-Standard Car Mfg. Co.,** Chicago. **Hugh W. Foster** was named advertising manager.

George E. Tate was elected treasurer, **Federal Foundry Supply Co.,** Cleveland.

Donald M. McGrath was appointed general manager, Red Bank Division, **Bendix Aviation Corp.,** Red Bank, N. J. He was assistant director of sales and service for the Eclipse-Pioneer Division at Teterboro, N. J. He succeeds **W. W. Fisher,** named general manager of a newly created division at Davenport, Iowa.

Ray F. Sparrow was named senior vice president, **P. R. Mallory & Co. Inc.,** Indianapolis.

Charles G. Cooper, manager of the Washington office, **Cooper-Bessemer Corp.,** Mt. Vernon, O., was elected a vice president.

OBITUARIES . . .

John Thrailkill, 74, for the last 25 years chief expediter, **Alliance Machine Co.,** Alliance, O., and connected with the firm 48 years, died Dec. 27.

Carl E. Heussner, 51, an authority on electroplating and director, materials testing, Chrysler Corp., Detroit, died Dec. 28.

Arthur Davidson, 69, secretary and general sales manager, and a founder of **Harley-Davidson Motor Co.,** Milwaukee, died Dec. 29.

Albert E. Quinn, 49, factory superintendent, **Chicago Gear Works,** Chicago, died Jan. 5.

George T. Walne, 46, vice president, **General Box Co.,** Chicago, died Jan. 2 of a heart attack.

Bruno Witt, 64, an expert in diesel engineering and metallurgy of engines, and for the last four years associated with **White Motor Co.,** Cleveland, died Jan. 8.

Sheldon Piper, 35, president, **Huron Machine Co.,** Chicago, died Jan. 5 when his private plane crashed near Palatine, Ill.

Robert L. Hannan, 34, sales representative, **Beardsley & Piper Co.,** Chicago, a passenger in the private plane of Sheldon Piper (noted above), was killed in the plane crash near Palatine, Ill., Jan. 5.

Production AND Engineering NEWS AT A GLANCE

BIGGER MOLY INGOTS— Experimental production of 1000-pound ingots of molybdenum by melting compressed and sintered powder under an arc and in a vacuum is making the pure metal available for a wide range of application studies. They include (p. 106) piercing plugs for seamless tube mills, gas turbine blades, electrodes for heating molten glass, die casting dies for brass and other nonferrous metals, and components of jet engines, rockets and nuclear reactors. Addition of alloying elements increases hot strength of the metal but of course complicates fabricating problems.

DOUSING THE GLARE— Dulling the reflective surfaces of stainless steel or guided missiles, aircraft instruments and other apparatus is possible with use of a new plastic synthetic finish which adheres tightly to the metal surface. Elimination of light reflection and glare in such applications has obvious military significance. Baking temperature is 275° F for one hour.

FINGERS INSTEAD OF FORKS— Twelve spring-loaded steel fingers comprise an unusual attachment (p. 105) fitted to lift trucks for handling crated water heaters. Vertical slats in the crates push back some of the fingers, the rest protruding between the slats to engage horizontal cleats, thereby permitting the crates to be lifted, as many as three at a time. Pallets are dispensed with, fewer crates are damaged in handling, truck maintenance costs are lower and six men are now moving more crates than did a former crew of 22.

HOT BOX FOR SURE— Shipment of 15 tons of "hot" steel with full approval of the law, has been accomplished by a Canadian steel company. An ingot of this size at a temperature of 1700° F was shipped 200 miles in an insulated cast iron box bolted to a railway car. The heat loss upon receipt was 125°. The consignee does not relate whether upon opening the cast iron box he thought he had really discovered "the thing."

SELENIUM KILLS POROSITY— Degasification of induction furnace heats of stainless steel by the addition of 0.25 pound of selenium per ton has replaced (p. 116) former methods of combating hydrogen and nitrogen porosity, such as oxidation with ore during melting or the use of inert gas injections prior to tapping, at a Michigan alloy steel foundry. The addition brings selenium content to only 0.0125 per cent which has no measurable effect on physical and mechanical properties, welding characteristics or resistance to corrosion.

MORE WORK, LESS SPACE— Electric furnaces with silicon carbide resistor elements have been installed for pack carburizing small parts going into a leading make of typewriter which, incidentally, has 2250 individual parts in its assembly. The furnaces are loaded with either 28 round or 24 square carburizing pots or 20 annealing boxes. Each alloy box weighs 73 pounds and carries a load of more than 150 pounds. The operation is claimed to yield a 50-60 per cent increase in capacity per furnace with only a 25 per cent increase in floor space. Good uniformity of results has been observed throughout the temperature range of 1500° to 1775° F.

INTRICATE CASTING— Skill of die casters seems to grow with each succeeding new part developed. A striking recent example is the impeller for a new automatic transmission in the automotive field. It has a curved cylindrical wall from which eleven spiral blades rise at 15¼-degree angles (1 inch off center from the center of the part). Die engineers at first said the job couldn't be done but it was. Not only is any slide interchangeable with the others but a horizontal section anywhere through the blades which taper from 0.045 to over 0.25-inch, shows them to be the same thickness within 0.002-inch. The shot weighs about 2 pounds and is running at better than 50 an hour.

SACRIFICE WHEELS— In analyzing grinding costs, it is well to keep in mind that the important factor is total grinding cost and not simply wheel cost, the former including labor cost and overhead charges. For example, an increase in rate of production of 10 per cent, achieved by changing to a softer, faster cutting wheel, may have a greater effect on the total grinding cost than a 20 per cent increase in wheel life resulting from the slower wearing wheel, by virtue of the higher rate of production and lower overhead per unit of parts ground.

Metalworking Outlook—p. 25 *Market Outlook—p. 123*

RADIOACTIVE TRACERS

Detect Soil on Cleaned Surfaces

No finishing system can be efficient unless all grease, dirt and other extraneous matter is completely removed from the metal to be plated. When is a surface clean? Here is a practical test, the most recent advance in evaluating degree of cleanliness

THOROUGH cleaning of metal surfaces is an important factor in the successful use of any finishing system. The presence of grease, dirt, and extraneous materials affects the adherence and continuity of coatings, metallic or organic.

Many manufacturers have made substantial savings in cleaning expense by adopting modern methods and properly designed equipment. Although each job generally has its own cleaning requirements, suitable practical methods are available for determining whether a surface is "clean."

One of the features of the recent 98th meeting of the Electrochemical Society, held in Buffalo, was a symposium on methods for evaluating the degree of cleanliness of a metal surface. Most recent advance in the detection of soil retained by metal surfaces after cleaning is based on the radioactive tracer technique. The process was discussed by R. E. Kamp, Monsanto Chemical Co. J. C. Harris and W. H. Yanko, also of Monsanto's research laboratories, collaborated in the development of this technique.

Radioactive Tracer Technique—Tests carried out where this method was used to quantitatively measure the degree of sensitivity of other soil detection methods were also described. The radioactive tracer method for metal cleaning evaluation is operated by combining with an oily soil a C_{14} tagged organic compound dispersible in the oil, permitting a quantitative estimate of soil removal or retention. Sensitivity of the method has been measured as 2×10^{-7} g/sq cm.

The soil detection method, as worked out in Monsanto Research Laboratories, involved the use of a soiling composition consisting of 1 per cent of the radioactive tracer compound, N,N-di-n-butyl stearamide in SAE No. 60 oil. Two per cent fluorescent green HW 175 per cent dye was also used in the soiling mixture. The circular test pieces used were made of No. 32 gage sheet steel; area on which the soil was spread was 2.26 sq cm. Over this area was evenly spread 2.5 mg of the soiling mixture, forming a thin but continuous layer. The test pieces were evaluated for initial activity before soiling.

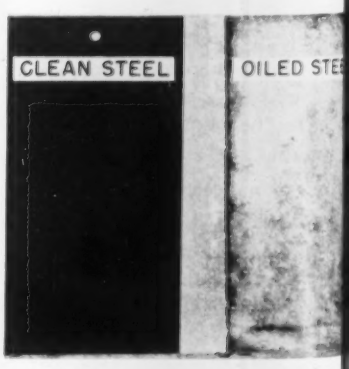
Test Pieces Fully Immersed—The cleaning procedure involved full immersion of the test pieces suspended from hooks in a boiling solution of the cleaner followed by rinsing by six dips each in two separate beakers of boiling distilled water. Immersion time was varied to give pieces which had differing amounts of retained oil. The cleaning solution consisted of 5 per cent Santomerse No. 1; 95 per cent anhydrous sodium metasilicate. The concentration used was 5 per cent by weight in distilled water, employing a total volume of 35-40 ml.

Test panels after cleaning, rinsing, and drying were first subjected to the ultraviolet test described later. The second test was the determination of residual surface radioactivity.

Equipment for the radioactivity test consisted of a Geiger-Muller tube with a mica window characteristic of 2.4 mg per sq cm, with a 64 scaler, timer and sample holder. The sample holder is essentially a spring-loaded platform that can be lowered so as to insert the sample, and then raised to place it next to the window. Using the tracer technique, the sensitivity was found to be approximately 2×10^{-7} g/sq cm as compared to the approximate limits of sensitivity attainable gravimetrically of 5×10^{-5} grams.

Tests showed that the fluorescent estimation of the plate gave no indication of retained dye, yet after subtraction of the background count, counts still remained at least double to quadruple the background, indicating a so-called "unclean" condition. Table I summarizes the various tests for estimation of surface cleanliness.

Water Break Test—The third test applied to the cleaned specimen to appraise the sensitivity of other cleanliness evaluation methods was the water break test. The panel was immersed in a stream of distilled water at room temperature and examined.



Clean steel compared with steel coated with mineral oil as photographed under ultraviolet light. Courtesy Allied Chemical & Dye, National Aniline Div.

After this the copper plate test was applied. The test pieces were immersed for 3 minutes in a solution containing 40 g/L of copper sulphate pentahydrate plus 17 g/L sulphuric acid. Then the test piece was tested for tenacity of plate by vigorously rubbing the surface with several thicknesses of fine absorbent paper.

Data in Table II summarize the limits of sensitivity of the various test methods. Cleanliness tests can be listed from least to most sensitive as follows:

Fluorescent dye (least sensitive)
Copper plate
Water break
Radioactive tracer technique (most sensitive)

Arranged to show increasing sensitivity, based on the fluorescent dye method as unity (least sensitive) the following rating was given by Kamp.

	Comparative Sensitivity
Fluorescent dye	1
Copper plate	4
Water break	11
Radioactive tracer	110

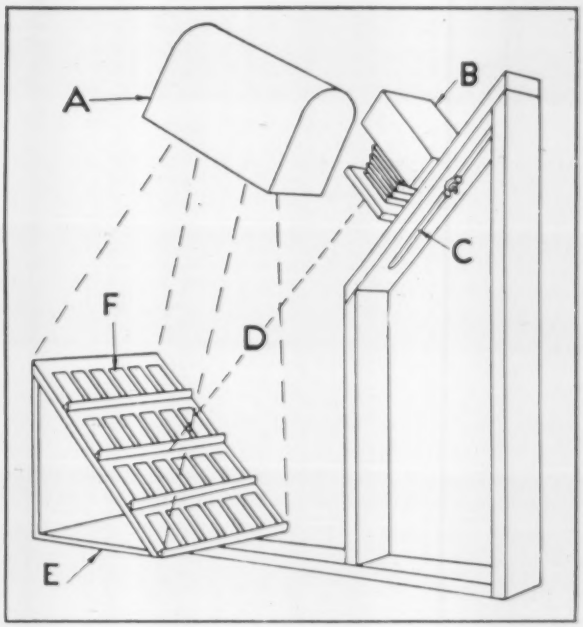
The formula given below was used for calculating the amount of soil remaining on the test pieces from the data obtained by the radioactive method.

$$\frac{\text{Final count}}{\text{Initial count}} \times \frac{\text{mg soil}}{\text{area test piece}} = \text{Soil remaining}$$

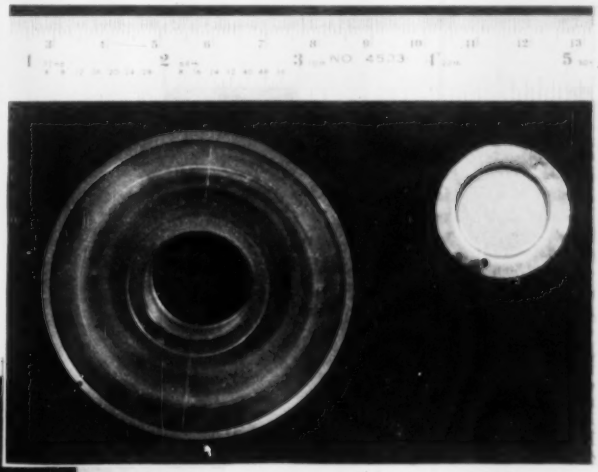
The radioactive tracer technique applied to metal cleaning is more sensitive than existing methods for determination of soil removal, is quantitative in character, and appears to be a distinct advance in methods of testing cleaner efficiency.

Fluorescent Method—L. F. Hoyt, National Aniline Division, Allied Chemical & Dye Corp., described a method for estimating soil, using ultraviolet light techniques. Mineral oil fluoresces brightly under ultraviolet light while animal and vegetable oils may be caused to fluoresce by the addition of an oil-soluble fluorescent dyestuff.

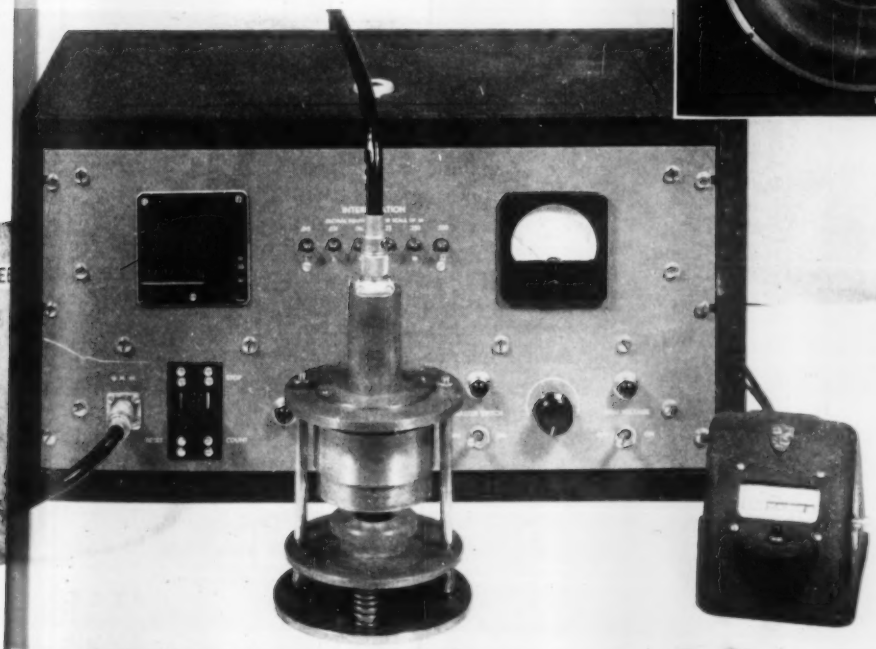
This fluorescence is capable of being photographed.



Arrangement for photographing cleaned panels under ultraviolet light. (A) Ultraviolet Hanovia analytic model quartz lamp; (B) 4 x 5 view camera with Wratten K-2 filter and Tri-X film; (C) slot for camera adjustment; (D) distance from camera lens to easel, about 36 inches; (E) easel; (F) metal strips



Above—Plastic platform (left) and metal test piece (right) used in radioactive tracer technique for cleaner evaluation. Courtesy Monsanto Chemical Co.



Left—Complete testing apparatus for cleaner evaluation using radioactive tracer method, showing tube assembly and scaling apparatus

TABLE I

TESTS FOR ESTIMATION OF CLEANLINESS

Test	Apparent Sensitivity	Method of Estimation
Water break	Not known, but quite sensitive	
Gravimetric	5×10^{-5} grams	Very sensitive balance
Fissie paper	Not known	Visual
Spot	1 part in 20,000	Visual and actual trial
Fluorescent dye	4×10^{-6} g/cm²	Gravimetric
Copper plate	Not known	Visual
Radioactive Tracer	2×10^{-7} g/cm²	Radioactive Tracer

thereby providing a method for recording the location and amount of oil residue both before and after cleaning. Since the intensity of the white fluorescence is proportional to the amount of oil present, and since clean metal under ultraviolet appears black or nearly so, a natural scale of measurement is established.

Under the invisible ultraviolet, a clean metal surface appears black, while an oiled surface glows with a brilliant fluorescence. This describes the extremities of the visual scale which are established by this test method. The technique may be applied to any base metal wherein it is desired to test the efficiency of the cleaning cycle.

Strips Hand-Scrubbed—To prepare uniformly-oiled metal strips for testing, 2 x 4-inch test strips were scrubbed by hand, thoroughly rinsed in alcohol and allowed to dry. Strips of wool flannel, 1⅞ x 3⅞ inches were saturated with the oil to be employed in the test. The oil-saturated wool strips were alternated with the metal strips to form a stack, with oil

Close-up of Geiger-Muller tube, platform and light shield as used in the Monsanto laboratory tests on cleaner evaluation. Pan-shaped test piece is inserted in lower plastic ring as shown

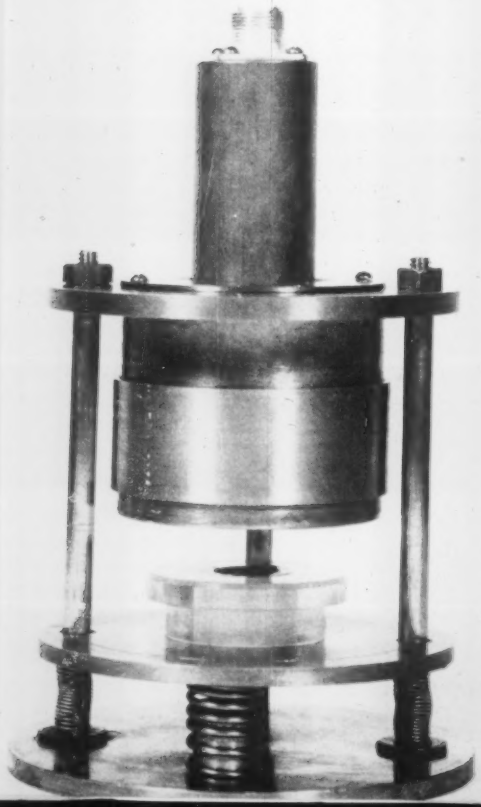


TABLE II

SENSITIVITY OF CLEANLINESS TESTS

Sample No.	Counts Min.* ± Range	Maximum % Soil Remaining	Reaction to Test — Fluorescent Dye	Water Break	Copper Plate
1	261 ± 5	0.96	+	+	+
2	69 ± 4	0.26	+	+	+
3	25 ± 2	0.10	+	+	+
4	7 ± 2	0.03	—	—	—
5	0 ± 2	0.008	—	—	—

* Background count of 18 subtracted. Original count/minute 12,650 ± 15.

Based on data presented by R. E. Kamp, Monsanto Chemical Company before the 98th meeting of the Electrochemical Society.

saturated wool strips and protecting metal plates at top and bottom.

The stack of plates was then placed between the jaws of a hydraulic press, and a pressure of 500 psi applied and maintained until no more oil oozed out. The pressure was then released and the strips removed and retained in a perfectly horizontal position until taken out of the stack one at a time for the cleaning tests.

After subjecting the metal test plate to the cleaning cycle and composition which it was desired to test, followed by rinsing and drying, the plates were placed in a rack designed so they did not touch each other, and photographed. The ultraviolet radiation was incident to the surface of the panels, at an angle of 45 degrees with the lamp about 30 inches from the midpoint of the rack. Data given in Table II were presented before the symposium to describe quantitatively the sensitivity of the fluorescent method as compared with other methods for cleaner evaluation based on the radioactive tracer technique.

Standardization Important—A. Mankowich, Aberdeen Proving Grounds, emphasized the importance of rigorous standardization of every step of the procedure. This is necessary to obtain reproducibility in the subsequent evaluation of the degree of cleanliness attained. Desirable features of a soil removal test for convenience, simplicity, simulation of plant practice and correlation between the test and plant results. Main steps in a soil removal test:

Step 1—Preparation of test panels
Step 2—Soiling of test panels
Step 3—Cleaning or soil removal
Step 4—Rinsing
Step 5—Degree of cleanliness evaluation

One possibility pointed out in Mankowich's paper was that if correlation is obtained between the soil removal test and plant results, a laboratory performance type of specification may be written around the soil removal test for procurement purposes. Such a specification for alkaline cleaning compound contains no chemical composition requirements. Instead, the supplier's product is required to at least equal the performance (in soil removal) of a standard comparison compound of given composition.

Supplemented by a few physical property requirements, such as pH and corrosivity, the laboratory performance type of specification, built around a metal cleanliness test, may be an advantage to both supplier and user. The supplier is not limited to specific ingredients, while the user benefits from the supplier's knowledge, and is not subjected to delays.

Stacking or taking three crates from the third tier is now a one-man, palletless operation, using a fingerlift-equipped truck

Fingerlift Attachment Simplifies Crate Handling

Using A. O. Smith Corp.'s new lift truck accessory, six men now move more crated water heaters than 22 men could handle by former methods

A MAJOR saving in manpower, elimination of pallets, less damage to crates and lower lift truck maintenance costs are some of the benefits A. O. Smith Corp. is reaping from a new method of handling crated water heaters. Lift trucks at the Kankakee, Ill., plant are equipped with a fingerlift attachment which obviates the need for fork type lifting arm.

Crates can be lifted singly, in pairs or in threes directly from the production line and transported either to storage or directly into boxcars for immediate shipment. They are stacked in banks three crates high and stowed in boxcars two high.

Fingers Spring-Loaded—Design of the attachment embodies a series of spring-loaded fingers mounted on a horizontal shaft so that slight pressure on the tips of any of the fingers causes them to retract by tilting backwards. A vertical apron below this shaft serves as a rest when the mast is tilted back. The whole assembly is mounted on a side shift mechanism.

In operation the truck moves forward until the apron meets the crate. In this position some of the fingers protrude between vertical slats while others are pushed back. Then as the truck mast is raised, fingers between the slats engage a horizontal cleat or the crate top to raise it. The tilted fingers merely slide up the slats out of the way.

One Man, One Truck—At the end of the production line the truck picks off crated water heaters two or three at a time and places six crates on a dolly parked nearby. Then the truck takes either two or three more crates on the fingerlift, hooks onto the dolly and transports eight or nine crates to storage and stacks them.

This entire operation is carried out by one man on one lift truck. When pallets were used, two men manhandled the crates from the production line to "take-it-or-leave-it" pallets on the dollies and two more men were atop the stacks.

In another operation the fingerlift takes finished heaters directly from the production line and stacks these in boxcars in one short trip, again using only one man on one truck with no additional manpower and no use of pallets. Two men with fingerlift trucks regularly load 1600 heaters into 10 cars in 7½ hours.

Six for Twenty-two—Even though production is higher than ever before at the Kankakee Works, the number of lift truck operators and helpers was reduced from 15 to five and the stock room repair force from seven to one.

Negotiations have been completed with Clark Equipment Co., Battle Creek, Mich., for marketing the fingerlift under A. O. Smith license.

Ready to lift, some fingers engage cleats while others are pushed back by the slats. Counting from the left, fingers 1, 2, 6, 7, 11 and 12 are back. Nos. 3, 4, 5, 8, 9 and 10 are carrying the load

ARC-CAST MOLYBDENUM

Probed for High-Temperature Utility

By J. L. HAM
Climax Molybdenum Co. of Michigan
Detroit

MOLYBDENUM, because of its high melting point, becomes a logical choice as a basic metal in alloys for structural high-temperature applications. The recently developed arc-cast process now makes this metal available in large sections. The process converts molybdenum powder to cast ingots. In consecutive stages, molybdenum powder is pressed into a vertical column which is sintered to increase its strength as it proceeds downward into a water-cooled mold where the metal is melted in an alternating-current arc established between the end of the formed powder electrode and the metal bath that comprises the top of the ingot.

Since applications for the pure metal are restricted by its limited strength at high temperatures, the development of molybdenum-base alloys with properties superior to those of pure molybdenum has recently been the subject of a considerable amount of experimental work. Selection of elements most suitable for addition to molybdenum requires the careful appraisal of existing information, and the judicious application of fundamental principles and theories likely to assist in the classification of the elements with respect to their effects on the properties of molybdenum.

This discussion is intended to lay the groundwork for further research on molybdenum-base alloys, to assist the engineer in recognizing immediate applications for which the molybdenum or molybdenum-base alloys now available may be suited, and to appraise the situation with respect to the possible availability of superior alloys for future applications.

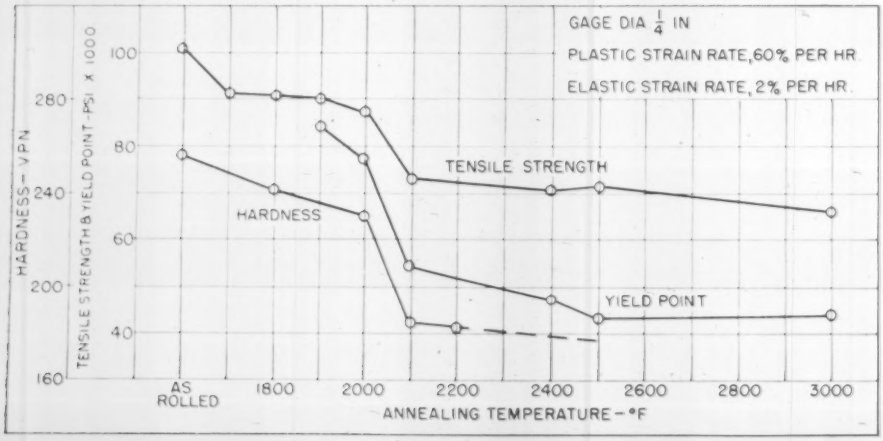
Some of the applications, presently being investigated are: Piercing plugs for seamless-steel tubing; gas turbine blades; electrodes for heating molten glass; die casting dies for brass and other nonferrous metals; certain components of turbojets, ram jets, rockets, and nuclear reactors and parts exposed to corrosive chemicals.

Advantages and Limitations—Insofar as is known at present, the size of ingot which can be produced by the arc-cast method is limited only by the capacity of available electrical and vacuum equipment. Ingots up to 6-inch diameter and weighing 150 pounds are now being produced, and equipment for the production of 1000-pound ingots, 9-inch diameter, is under construction. (STEEL, April 3, p. 64.)

Production of large ingots requires high melting rates and therefore large arc currents and high-capacity vacuum pumps, since final deoxidation is usually accomplished by the use of carbon, and the pressure of carbon monoxide must be kept below certain limits to avoid hot shortness due to the presence of MoO_2 at the grain boundaries of the metal. In order to meet the low oxygen requirement, it is generally necessary to use molybdenum powder as low in oxygen content as is commercially available.

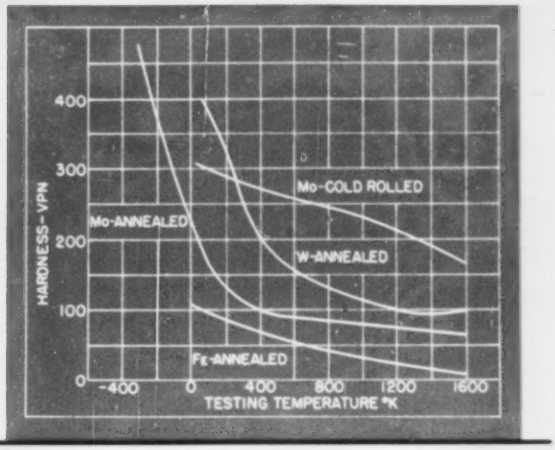
Certain alloying elements can be added in any desired proportion, but the range of alloy compositions which can be produced by melting in vacuum is quite limited for some elements, owing to excessive volatilization which leads to an ingot with a rough, wrinkled, encrusted surface.

Many of the elements which volatilize excessively in vacuum can be added in large amounts with little or no loss if an inert atmosphere is employed. Since there is no satisfactory way of removing carbon monoxide when melting is accomplished in an inert gas at atmospheric pressure, it is essential to use purer starting materials and add either special deoxidizers



Tensile strength, yield point and hardness of ½-inch rolled rounds of arc-cast molybdenum annealed at various temperatures are shown here

Pure metal, now cast in 9-inch ingots weighing 1000 pounds, is malleable above 2200° F and reacts conventionally to annealing. Alloys complicate fabrication problems of the cast ingots



Maximum and minimum hot hardness of pure molybdenum, minimum hot hardness of tungsten, iron

or relatively large amounts of carbon. Increased carbon additions are believed to raise the limit of the partial pressure of carbon monoxide under which adequate deoxidation of the molybdenum is attainable, but the excess carbon remains in the alloy. When special deoxidizers such as aluminum and magnesium are used, residual carbon can be held to a minimum and, although some of these deoxidizing elements remain in the casting, no deleterious effects so far have been detected.

To facilitate the preparation of materials for the study of molybdenum-base alloys, small ingots approximately 2 inches diameter by 8 inches long were made in a special machine by remelting rolled bars of low oxygen content in an argon atmosphere, utilizing small additions of carbon and other deoxidizing agents to assure adequate deoxidation. By this method elements too volatile to be added during melting in vacuum could be added in appreciable quantities with adequate recovery and control of their concentrations. To be consistent throughout the investigation, alloys of elements which were not so highly volatile were also prepared in this manner.

The advent of the arc-cast process has greatly simplified the production of high-purity molybdenum and its alloys in sizes which permit extensive testing. Until recently, existing information on molybdenum-base alloys was founded almost entirely on studies of samples produced by powder metallurgy. The use of melted and cast samples eliminates the experimental difficulties connected with sintering at high temperatures, and the uncertainties of homogeneity, density, and state of equilibrium inherent in the powder metallurgy technique. The availability of cast samples, therefore, justifies a critical review of the nature of the alloy systems previously studied and invites the study of many new systems.

Properties of Unalloyed Metal—Molybdenum ingots, pure except for carbon, are made up of coarse columnar grains; nevertheless, they are quite malleable above 2200° F. After a certain amount of working and recrystallization, the metal is also malleable at lower temperatures and can be formed into useful shapes by conventional methods.

Heating for forging or rolling may be performed in an ordinary gas-fired furnace. If the mixture is adjusted to produce a slightly reducing atmosphere, the oxidation loss is insignificant. When the ingot is forged, however, some oxidation occurs while the molybdenum is exposed to the air. Oxidation losses during hot working range from 1-2 per cent, when the metal is rolled in a conventional rolling mill, and heating is accomplished in a reducing atmosphere, to 6-10 per cent during extensive forging, when heating is accomplished in an oxidizing atmosphere. As properly deoxidized molybdenum is free from porosity, oxidation occurs only at the surface. The oxides developed can be removed readily by pickling in a bath comprising 90 per cent potassium hydroxide and 10 per cent sodium nitrite, maintained at 600-700° F.

Pure molybdenum reacts to annealing in an orthodox manner. Reheating the cast ingot has no appreciable effect on grain size, carbide distribution, or hardness. Plastically deformed grains can be recrystallized at temperatures dependent upon the amount of work, the actual working temperature, and the time at the annealing temperature. The lowest temperature at which recrystallization will start is approximately 1650° F; only severely worked metal such as cold-rolled sheet begins to recrystallize at so low a temperature. Less severely worked metal, such as bar stock, rolled from billets heated to 2000-2100° F, begins to recrystallize at about 1900° F, and recrystallization may be completed after 1 hour at 2100° F. Bars reduced 15 per cent in cross-sectional area by forging in the range 2300-2600° F will undergo extensive recrystallization on annealing at 2600-2800° F.

Pure molybdenum is relatively soft as-cast, 170 to 190 VPN, but hardens rapidly on working and may attain 300 VPN after severe cold work.

A representative curve shows the ductility, strength, and hardness of pure molybdenum. These properties, of course, depend to a large extent on the amount and type of work which has been applied. However, after working sufficiently to confer uniformity and a fine grain size, these properties depend primarily on the annealing temperature.

In most types of service, deformation of a part is undesirable and since the unrecrystallized molybdenum has been found more resistant to impact, i.e., it has a lower temperature for the transition from a ductile to a brittle fracture, full recrystallization is not recommended, except where service

Condensed from a paper delivered by the author at the 1950 annual meeting of the American Society of Mechanical Engineers, New York.

above the recrystallization temperature is anticipated, or where it is necessary to prepare the metal for further working. Recrystallization appears to be particularly objectionable for the more complicated stress systems. In the bend test on sheet, fully recrystallized molybdenum proves to be inferior, maximum capacity for bending occurring upon annealing in the range 1600-1800° F.

Good Creep Properties—The few results available at this time indicate that, above 1600° F, the creep and stress-rupture properties of pure molybdenum are superior to those of any of the cobalt, iron, or chromium-base alloys, provided, of course, that a protective atmosphere or coating is used. Comparison of molybdenum from various sources with respect to creep or stress-rupture properties may be misleading unless the specimens have received equivalent amounts of work and are in comparable states of recrystallization. Differences in purity may lead to recrystallization of some samples but not of others in the same treatment. Furthermore, before comparing samples by any elevated-temperature test, the samples should be annealed either at the testing temperature for a time comparable with that of the test or considerably above the testing temperature for a short period. This is particularly important when testing near the recrystallization-temperature range, of about 1600-2000° F, for pure molybdenum.

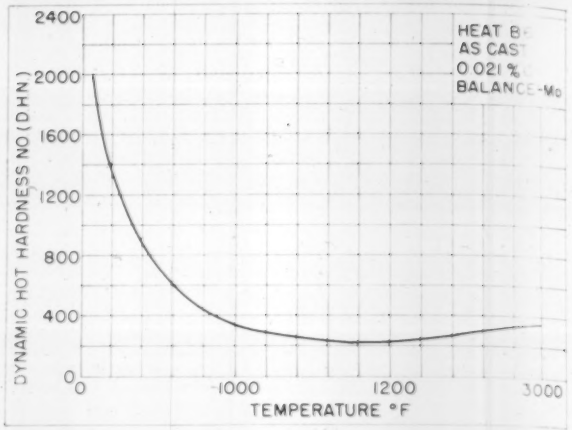
Of the various tests applied to molybdenum and molybdenum-base alloys, one of the simplest and most useful has been the Vickers hot-hardness test, for hot hardness has proved to be a convenient criterion for selecting materials likely to possess strength at high temperature and worthy of more time-consuming tests such as the stress-rupture test. At least, it can be shown that high hot hardness is a necessary—if not sufficient—property for good load-carrying capacity at high temperatures. The Vickers hot-hardness apparatus was developed for classifying chromium-base alloys.

The hot hardness of molybdenum is sensitive to working and annealing. Hot-hardness curves for pure molybdenum in its softest condition (worked and fully annealed) and in its hardest condition (severely cold-rolled) are presented in an accompanying chart. For comparison, curves for fully annealed pure iron, and pure tungsten are included. Like other metals, molybdenum in its softest condition exhibits a rapid rise in hardness when cooled below a characteristic temperature. For molybdenum, this temperature is about 400° F.

Relative hardness up to 3000° F has also been determined for pure molybdenum and a number of its alloys by means of a specially built apparatus which drops a rod tipped with a tungsten-carbide ball

EFFECT OF GAGE SECTION DIAMETER ON ELONGATION AND REDUCTION OF AREA, 2 PER CENT TUNGSTEN-MOLYBDENUM ALLOY—⅞-INCH DIAMETER HOT-ROLLED BAR

Condition	—Gage diameter = 0.500 in.— Tensile strength, psi	Yield strength, psi	El., per cent	RA, per cent	—Gage diameter = 0.250 in.— Tensile strength, psi	Yield strength, psi	El., per cent	RA, per cent
As-rolled	83,200	72,200	4.0	3.8	76,400	69,500	13.0	11.7
1 hr at 1800° F	77,300	70,000	3.5	3.0	77,600	69,900	23.5	18.2
1 hr at 2300° F	66,400	49,600	30.5	23.6	66,700	49,900	46.0	34.9



Dynamic hot hardness of pure molybdenum

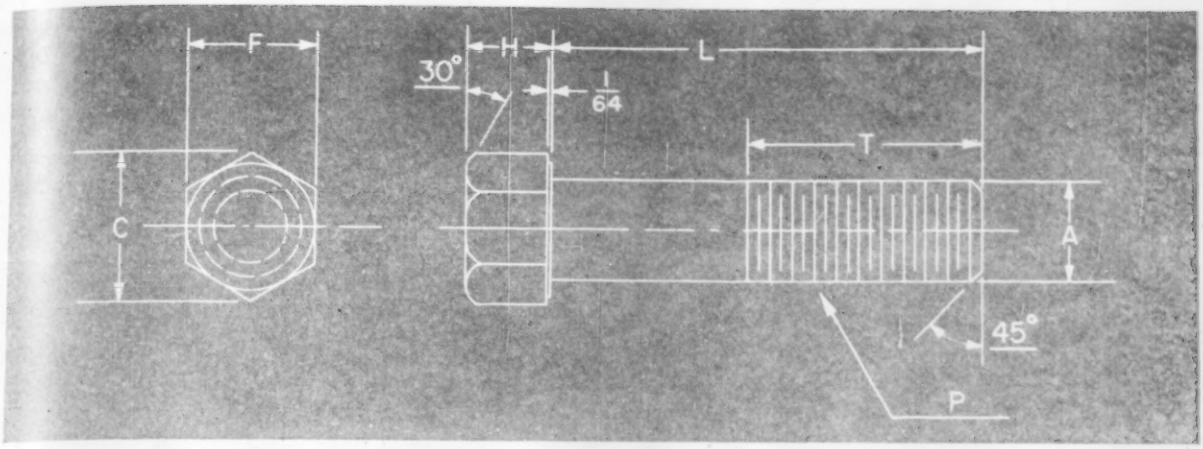
onto a disk-shaped specimen resting horizontally in an argon-filled furnace. The rod is caught on the first bounce by a solenoid activated electronically. The hardness scale is arbitrary, each value being equal to the energy of the rod divided by the volume of the impression, but these values can be correlated with Vickers numbers nicely by applying both tests to a variety of specimens. The weight of the rod is 385 grams and the height of fall 10 inches. A chart shows the dynamic hardness of pure molybdenum up to 3000° F. By comparison with this curve, the effects of various alloys on hardness up to 3000° F may be evaluated.

Need for Alloys—Although pure molybdenum is applicable for many purposes simply because it is a solid at temperatures where most metals and alloys are liquid, there are many potential applications requiring considerably more resistance to deformation at high temperatures than is possessed by pure molybdenum. Therefore, a primary purpose of adding alloys is to improve hot strength.

Alloy additions reduce the grain size of the cast metal and, although it might be expected that fine-grained ingots would be less susceptible to cracking on forging, no elements have been found so far which will refine the grain to a useful extent without increasing the hardness beyond the forgeability limit.

The elements which are worthy of consideration in connection with molybdenum-base alloys have been reduced to a reasonable number by the following general considerations. Careful examination of published information together with a certain amount of previous experience indicated that only the transition elements were soluble in solid molybdenum to any appreciable extent. It was assumed that the addition of elements which simply formed hard, brittle, insoluble compounds would not be likely to broaden the usefulness of molybdenum. Of the transition elements, many are too rare or expensive to be considered. Those which were sufficiently common to be of interest are titanium, vanadium, chromium, manganese, iron, cobalt, nickel, zirconium, columbium, tantalum and tungsten.

Workability of Alloys—All alloy additions which significantly increased the hardness of molybdenum complicated the problem of fabrication of the cast ingots. Throughout the investigation, evidence was obtained that the lack of hot plasticity was the result of intergranular weakness of the cast structure.



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STEELMAKERS

Stress Need for Scrap "Versatility" in ELECTRIC FURNACE PRACTICE

MANUFACTURERS of basic electric steel in this country enter the new year with a scrap problem facing them. Will there be an adequate supply with the nation in a sate of emergency? Will there be proper segregation of alloy elements to avoid contamination? Will charges include a higher ratio of bundled stock? These questions and others of interest to melters were answered adequately by the following authorities at the eighth annual conference of the Electric Furnace Steel Committee, AIME, Hotel William Penn, Pittsburgh, Dec. 7-9.

Importance of Scrap Is Emphasized

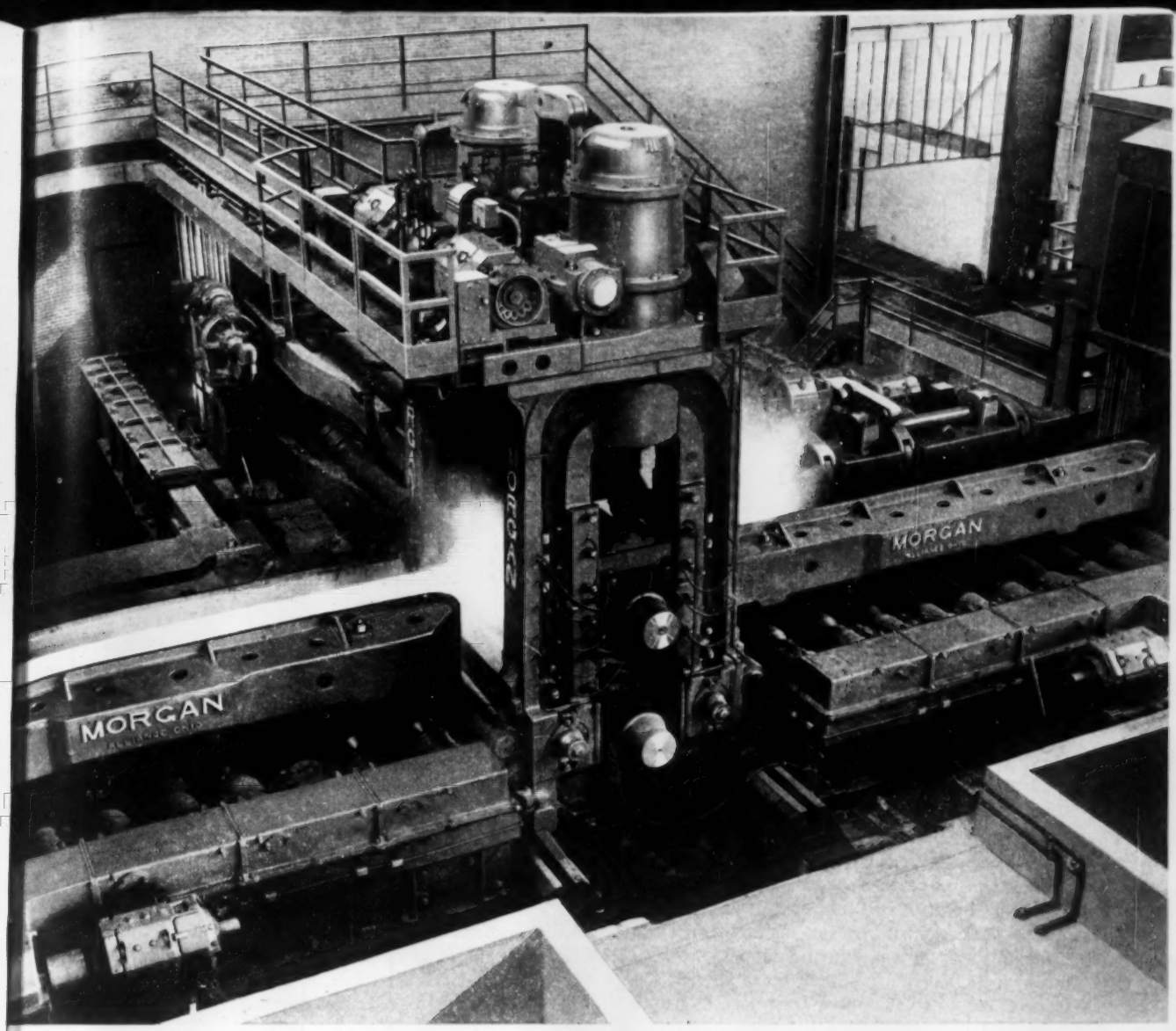
R. W. Farley, special mill metallurgist, and R. J. McCurdy, superintendent of No. 2 melt shop, Republic Steel Corp., Chicago.

The electric furnace, its capacity greatly expanded during World War II, stands today in a most critical position. The goal is to achieve complete versatility as to all grades and qualities of alloy steels, as required in any emergency. Attainment of this goal depends in large measure upon good charging, fast melting, reliable chemical control and meltdown, and freedom from injurious contamination. These factors are all characteristic of the scrap supply.

Main sources of scrap today are: Home scrap, about 15 per cent; purchased scrap, about 85 per cent. Home scrap consists chiefly of bloom, billet, and bar crops. Of the purchased scrap, about 70 per cent is waste material coming directly from the fabricators, the direct producers of scrap. This is the most desirable form of purchased scrap from the standpoint of segregation of analysis, density and contamination. Another good item is punchings and short heavy clippings. Inasmuch as closer control of the scrap analysis is necessary for the electric furnace than for the open hearth, it is increasingly important that the above items from known sources be channeled to the electric furnace.

In the shop of origin of this report, the best distribution is approximately equal quantities of crops and heavy scrap on the bottom, medium weight next, and light weight on top. In the absence of sufficient amounts of any one of these three groups, the other groups should be balanced to yield the same average density. For fast melting, sizing and weight of scrap cannot be considered as independent. It is imperative that light scrap be cut into smaller pieces. It permits control of the bulk density of the lighter scrap in the charging box; and, in the furnace, contributes to safety and avoids one important cause of damage to the furnace.

Average bulk density in the charging box is the chief factor in promoting high production rates. Be-



Morgan 40″ — 2 High Reversing Blooming Mill direct connected to two 3000 Hp. 40/100 Rpm. motors. Top roll and both spindles are hydraulically balanced by individual cylinders connected to an air hydraulic system. Speeds of motor driven screw down, feed rollers, mill tables and manipulator are regulated by variable voltage control.

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cause the furnace will hold a certain number of boxes, the number of boxes required for the charge regulates charging time, number of back charges, and the rate of heat absorption. In a 70-ton furnace to be charged with 170,000 pounds total, including 25,000 pounds of crops, a balance of scrap having a density of 132 pounds per cubic foot in the box can be handled in one charge. Material with a density of 109 pounds per cubic foot will require a back charge of 25,000 pounds. These figures appear reasonable, considering that with present equipment good sheet scrap can be compressed in No. 1 bundles to a density of close to 200 pounds per cubic foot. Yet in this shop two or three back charges are common.

Segregation now is taking on an usual serious aspect. It is to be viewed as two separate requirements, namely, remove nonferrous metals and sort the various grades of steel. Undesired effects of alloying upon carbon and alloy steels not requiring a particular element are to be avoided. Alloying elements at a time when supplies are becoming critical must be conserved.

High contents of cobalt are occasionally found in the melts. The source has never been traced, in spite of a serious effort to do so; but it is supposed that cobalt originated in the production of high temperature alloy parts used, for example, in jet engines. If this is so, then this item will increase with increased production of these engines, and this kind of scrap must be segregated.

Workers within the mill must be taught to maintain segregation all the way into the furnaces, to keep a sharp watch for contaminants, to load for maximum density and uniform cubage per charge, and to charge furnaces for maximum melting rate and safety to the equipment and personnel. Education is a never ending effort; more so today because its best results often have been lost by rapid turnover of labor.

Increased requirements for the electric furnace have prompted the industry to reach out for new sources, stated Ray Bromley, M. E. Solomon Co., Pittsburgh, in commenting on this paper. Dealers have had to pick the better categories of scrap from the open-hearth grades and cut them to size for the electric furnace. If proper precaution is taken to eliminate alloy bearing scrap, this should present no problem.

The scrap man has recurrently promoted segregation of complex or less desirable grades of alloy scrap, only to find that there was no ready market for the grade after it had been kept separate. Consequently, the machinery breaks down and in the end the material contaminates another grade.

Increasingly, bundles will form an important portion of our scrap supply. In 1949 the percentage of bundles was 15.8 of total scrap consumption. This was exceeded only by No. 1 steel at 20.8 per cent and No. 2 steel at 19.1 per cent. If mills persist in turning out more sheets and strip, the scrap produced in the first instance in their processing and in the second instance by their obsolescence can be no heavier than the original product.

A well prepared bundle from new clips or old material from which alloys and nonmetallics have been separated and made to small size represents good material for the electric furnace.

Melting Techniques for Tool Steels Differ

C. F. Sawyer, Jr., plant metallurgist, Vanadium-Alloys Steel Co., Latrobe, Pa.

In basic electric practice the charge is made up in such a way that rapid melting and the composition on melting approximate the desired final composition as closely as practicable. The furnace is charged by placing the necessary limestone on the bottom, covering this with the heavy scrap such as hot tops, ingot butts, and billet crops, and following with the lighter scrap on top. Any necessary oxides of alloying elements or slag-making materials such as burnt lime are placed at about door level, so that they will be among the first part of the charge to melt. This gives a slag cover to help prevent undue oxidation during melting.

In the grades that are not slagged off, the amount of these slag-making constituents cannot be too high a percentage of the charge or else the large volume of slag resulting will unnecessarily prolong the heat time.

The low-carbon highly alloyed hot-work die steels present problems. The charge must be properly calculated to melt in at or slightly below the correct carbon content for finishing the heat, since boiling down the carbon will result in a substantial loss of tungsten as well as chromium and vanadium. Diluting the bath with low-carbon scrap is obviously limited by the capacity of the furnace.

Carbon is added in the form of crushed electrodes and stirred into the bare bath before the new slag-making materials are added. New slag is made up of burnt lime, sand, and fluorspar, which is allowed to melt before the reducing agent, coke or carbide, is added.

During the refining stage, it is necessary to rabble the heats frequently to lessen the possibility of stratification of the bath and also to bring about an increased contact between the molten metal and the reducing slag.

Any large additions of alloying elements to the bath, such as chromium in the 12 per cent chromium grades, must be preheated if heat times are to be kept within reason. Final additions of ferrotungsten always present a problem because of the high melting point of the alloy.

By preheating the ferrotungsten, using fines, and allowing as much time as possible between the addition and tapping, the possibility of finding small bits of undissolved ferrotungsten in the finished bars will be obviated. By recovering all possible alloying elements from the charge, final additions are kept as small as possible. Ladle additions of anything but small amounts of deoxidizing alloys are avoided if at all possible.

The temperature at which the ingots are cast is closely related to the temperature at which the steel is tapped. The better the ingot surface, the lower the incidence of corner cracking during hammer cogging and the higher the overall recovery. Casting

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too hot will increase the occurrence of ingots that stick in the molds and shorten mold life appreciably.

Burnt Lime Requires Careful Handling

C. B. Post, metallurgist, and **D. G. Schoffstall,** melt shop metallurgist, Carpenter Steel Co., Reading, Pa.

Standard reducing slag in the basic electric arc furnace generally is composed principally of lime, silica and fluorspar. The moisture content of the dead-burnt lime is most important and care must be taken in packaging and transporting the material from the kiln to the furnace floor, so that it is protected against atmospheric humidity up to the time of use. For furnaces 12 feet in diameter the pebbled grade is desirable, and larger sizes will probably be used on the larger furnaces.

Fluorspar is unique in its fluxing action in lime-silica slags. To obtain the best action from fluorspar, it is advantageous to keep its silica content at about 6 per cent.

It has been reported that lead and tin contaminate fluorspar and thus find their way into the bath but our experience does not show this.

Aluminum shot is used to assist the deoxidation of refining slags on some grades of steel. Grade A aluminum is used in the Carpenter Steel shops and it is conceivable that if grade A aluminum were not used contamination of the bath could occur, because of the

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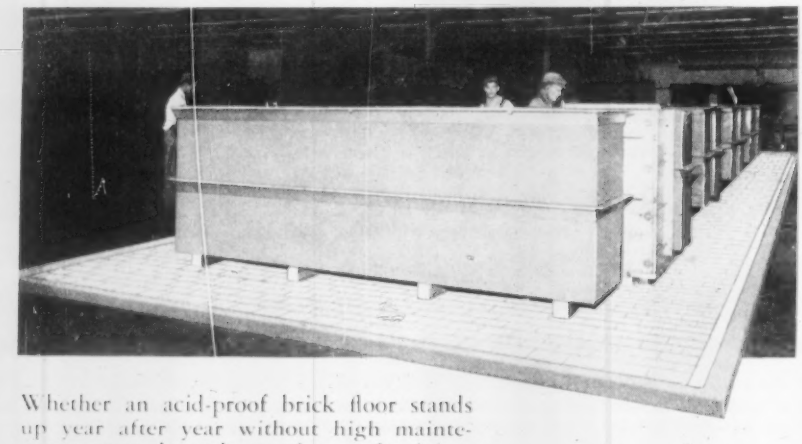

Whether an acid-proof brick floor stands up year after year without high maintenance costs depends mostly on the joints between the bricks. The thinner the joint the better the chance for long, trouble-free life. But with ordinary bonding mortars you can't get a joint much thinner than ¼".

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CALENDAR OF MEETINGS

† *Denotes first listing in this column.*

Jan. 15-18, Plant Maintenance Show and Conference: Cleveland Public Auditorium. Clapp & Poliak Inc., 341 Madison Ave., New York 17, is managing the event.

Jan. 17, American Institute of Mining and Metallurgical Engineers: Western section, open hearth committee, Iron and Steel Division, Los Angeles. Institute address: 29 W. 39th St., New York 18.

Jan. 18-20, Society of Plastics Engineers: Annual national technical conference, Hotel Statler, New York. Society address: 1601 Coit St., Irvington, N. J.

Jan. 21-23, Truck-Trailer Manufacturers Association: Annual convention, Edgewater Gulf Hotel, Edgewater Park, Miss. Association address: 809 National Press Bldg., Washington 4, D. C.

Jan. 22-26, American Institute of Electrical Engineers: Winter general meeting, Hotel Statler, New York. Institute address: 33 W. 39th St., New York 18.

Jan. 22-26, American Society of Heating and Ventilating Engineers: 57th annual meeting and exposition, Commercial Museum, Philadelphia. Society address: 51 Madison Ave., New York 10. Exposition managed by International Exposition Co., 480 Lexington Ave., New York.

†**Jan. 24-25, National Industrial Conference Board:** Conference on mobilization, Hotel Astor, New York. Board address: 247 Park Ave., New York 17.

Jan. 25-26, Steel Plate Fabricators Association: Meeting, Palmer House, Chicago. Society address: 37 W. Van Buren St., Chicago 5.

Jan. 28-Feb. 1, Associated Equipment Distributors: 32nd annual meeting, Stevens Hotel, Chicago. AED address: 360 N. Michigan Ave., Chicago 1.

†**Jan. 29-Feb. 1, Institute of Aeronautical Sciences:** Annual meeting, Hotel Astor, New York. Institute address: 2 E. 64th St., New York 21.

Feb. 1-2, Society for Advancement of Management: Annual spring management conference. Sponsored jointly with Northwestern University centennial committee, Chicago chapter, SAM, address: 53 W. Jackson Blvd., Chicago 4.

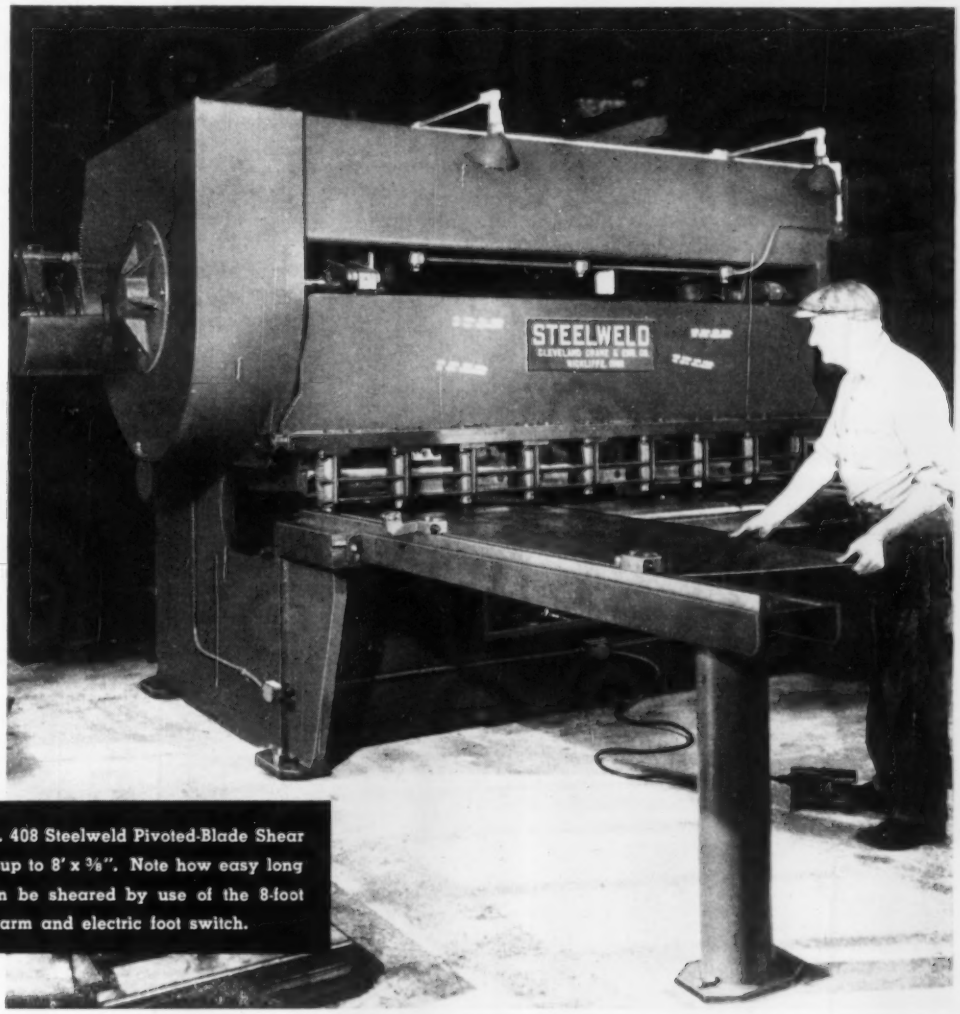
Feb. 8, American Coke & Coal Chemicals Institute: Regional meeting, Congress Hotel, Chicago. Institute address: 711 14th St. N.W., Washington 5, D. C.

Feb. 9, National Welding Supply Association: Western zone meeting, Hotel St. Francis, San Francisco. Association address: 509 Arch St., Philadelphia 6.

CORRECTION

†**Apr. 30-May 1, Association of Iron and Steel Engineers:** Spring meeting, Hotel Statler, DETROIT, not Buffalo, N. Y., as reported in Jan. 1 issue, page 333.

likes EASY KNIFE ADJUSTMENT



Series No. 408 Steelweld Pivoted-Blade Shear for metal up to 8' x 3/8". Note how easy long plates can be sheared by use of the 8-foot squaring arm and electric foot switch.

The easy knife clearance adjustment is one of the features that Johnston & Chapman Co., Chicago, greatly appreciates about their Steelweld Shear. Since they produce perforated metal of various thicknesses, which must have sharp, burrless edges, it is essential that the knives always be set with the right clearance to make the best possible cuts.

This company has had over 50 years of experience in shearing. They point out that if the knife clearance is too much, light gauge metals will bend, and if too close, a shear is unnecessarily heavily loaded and the knives dull rapidly.

The knife gap of their Steelweld Shear is adjusted in a few seconds by simply turning the crank conveniently located on the right end frame. The ease and simplicity of this adjustment is impressive when compared to other shears which require the entire bed be moved and gap be set by feeler gauges.

Johnston & Chapman supply perforated metal for all sorts of purposes, including screening for coal and for television equipment. Their shear is used for cutting mild steel, stainless steel, brass and other metals from 28 gauge to 3/8 inch thick.

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alloy content of freak aluminum alloys used in recovering and making off-grade aluminum.

Our concern with refining slags has been more from the standpoint of their physical characteristics and effects on metal bath than with mere chemical analysis.

Use of any material other than burnt lime, fluorspar and silica, in making up a slag, is questionable as much from the standpoint of the effect of the compound on the physical properties of the resultant refining slag as on how much time the compound would save in turning the slag.

Carbide slags vary from a high carbide content down to a faint carbide smell when immersed in water. The trend has been to get away from the high-carbide slag types and to work to a faint carbide slag even on the higher carbon grades of steel. We feel that the high-carbide slags do not wet the metal sufficiently to effect good deoxidation of the bath.

Demand Is Toward Smaller Furnaces

R. J. Wilcox, technical director, Michigan Steel Casting Co., Detroit.

Trend with induction melting equipment has been toward small furnaces or those of intermediate size installed in batteries of two or more units, thus making available a frequent supply of metal in relatively short intervals of time.

Linings are of the conventional basic type for induction furnaces and consist of magnesia-alumina grain (Normagal) rammed in place dry, around an asbestos form, to provide a crucible having a mean diameter of 16 inches and a depth of 21 inches. Sidewalls are 3 inches thick.

Since induction-furnace heats are substantially tailor-made, consisting of a simple remelting operation, it is absolutely essential that all material in the charge are of known analysis.

After the required tapping temperature has been reached, a final degasifying addition of ferroselenium is made in the amount of $\frac{1}{4}$-pound of ferroselenium per ton. This addition is in the amount of 0.0125 per cent Se, since ferroselenium contains an average of 50 per cent Se. It has been found to be a definite insurance against gas porosity of the reducing-gas type, as frequently experienced from high hydrogen or nitrogen contents.

Selenium degasification has replaced former methods of combating hydrogen and nitrogen porosity, such as oxidation with ore during melting or the use of inert gas injections prior to tap. It is the result of considerable experimental effort in which it was found that minor quantities of selenium are extremely effective for the prevention of gas porosity.

Extensive studies have been made in determining the effect of a minor selenium content on physical and mechanical properties, welding characteristics, and resistance to corrosion. It has been established that no measurable effect exists on such properties with selenium up to approximately 0.10 per cent Se.

Operating data on the performance of the 1000-pound units in the production of 18-8 for castings are: Power consumption, 779 kwh per ton; melting time, 58 minutes per 1000 pound; average lining life, 110 heats per lining; refractory cost, $4.41 per ton.

Experience indicates the following approximate recovery of elements going into the makeup of the 18-8 type alloys:

ELEMENT	% RECOVERY	ELEMENT	% RECOVERY
Carbon	100	Silicon	94
Chromium	99	Molybdenum	95
Nickel	100*	Columbium	92
Manganese	90	Selenium	89

* Because of slight losses in other elements, final analysis of nickel frequently shows a higher quantity than the original percentage composition calculated.

The induction furnace is characterized by high recovery of alloys. In certain of the heat-resisting types, particularly the 35 per cent Ni, 15 per cent Cr type, in which a carbon content of 0.40 to 0.50 per cent is desired, a loss in carbon frequently is experienced on extended holding of the heat at high temperatures.

Equipment Makes Mining Safer

Suitable for use in underground mines where material is mined in high stopes by room-and-pillar methods are new techniques and equipment developed by the Bureau of Mines. The four new types of roof scaling apparatus, described in report 4739 and available from the bureau, 4800 Forbes St., Pittsburgh 13, Pa., are:

1. A boom-type scaling rig with self-leveling platform constructed on a small, tractor-powered traveling crane. Men working from this platform can scale mine walls and roof 27 feet from the floor.

2. A conventional fork-truck designed to provide a remotely controlled working platform from which men can scale to heights 27 feet above the mine floor. Drills can be mounted on the guard rail of this unit for drilling plug holes in pillars and roofstone for eye pins to support electric cables and other wiring.

3. Platform mounted on a telescoping tower constructed to elevate men 65 feet above the mine floor. With it men can work from the platform at heights from 5 to 65 feet.

4. An industrial gun and lightweight scaling bars that have been tested for removing loose rock from mine walls with varying degrees of success.

Extinguisher Carries 350 Pounds

A portable dry chemical fire extinguisher announced by American-LaFrance-Foamite Corp., Elmira, N. Y., carries 350 pounds of the fire extinguishing compound which is discharged at a maintained operating pressure of 200 psi by 2000 psi of dry nitrogen. Known as the Alfco 350 engine, it is said to be the largest unit of its kind, but may be handled by two men.

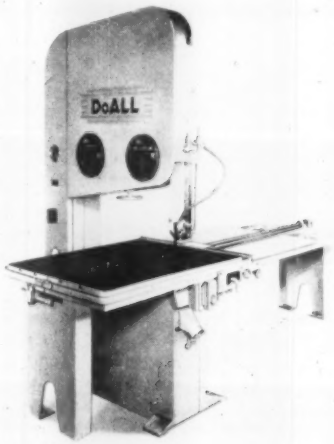
Density of the dispersion of its sustained pressurized discharge cools and insulates the operator from the heat of the fire. Discharge range is from 20 to 25 feet, enabling the operator to move up on the fire and put it out with the full force of the blanketing discharge.

New Products and Equipment

Band Machine Hydraulically Fed

Operating over a speed range instantly variable from 40 to 10,000 fpm is the HP-36 Hydro-Feed bandsawing machine developed by DoAll Co., Des Plaines, Ill. Throat capacity is 36 inches and work height is from 15½ inches up. Machine uses standard saw bands up to 1-inch wide. It is well guarded and has automatic synchronized hydraulic aircraft type brakes. A 10 hp drive motor with three speed transmission and overload protected Speedmaster variable drive gives a tool speed range.

Workpieces weighing 1 ton or more may be handled on the 40 x 48-inch



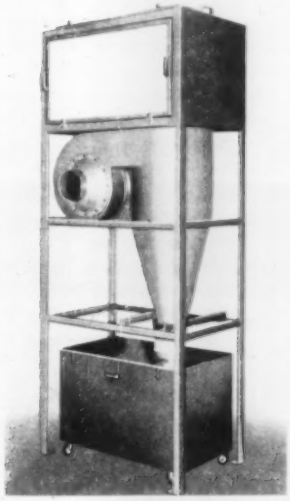
T-slotted hydraulic table that slides on 28 rollers. Table stroke is 36 inches. Infeed rate is controllable up to 18 fpm with quick return. Job selector dials and sets of guides provide for slow and high speed sawing. Band speed and tension indicating dials, converging beam work light, chip blower and dust spout for exhaust connection are new features.

Check No. 1 on Reply Card for more Details

Large Capacity Dust Collector

Designed for those dust collecting operations involving large amounts of dust, lint, dirt, chips, shavings, etc., is the unit type dust collector offered by Aget-Detroit Co., 139 Main St., Ann Arbor, Mich. The model 20B30 unit uses a 3-hp continuous duty motor direct driving a paddle wheel self-clearing fan, a cyclone separator and a second stage fiber glass filter with shaker which permits the cleaned air to be recirculated within the working space.

Caster equipped roll-away bin of 9 cu ft capacity is arranged so that it receives the bulk of the collected dust directly from the bottom of the cyclone separator. Suction capacity is 2405 cfm on a 7-inch inlet pipe. Fiber glass filter is in three sections, each in a separate steel frame

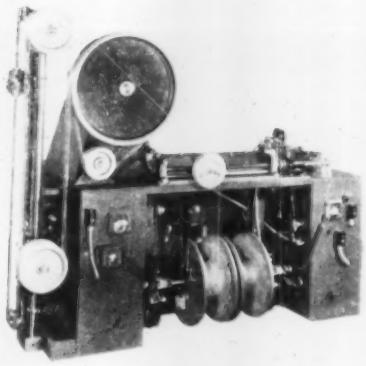


assembly for quick removal. Filter shaking lever shakes dust from all three filter sections simultaneously. Floor space required is 22 x 44 inches and overall height is 108 inches.

Check No. 2 on Reply Card for more Details

Continuous Extrusion Takeup

Built with integral capstan and tension stand is a high speed constant-tension, dual-reel continuous takeup unit for wire or cable, announced by Industrial Ovens Inc., 13825 Triskett Rd., Cleveland 11, O. Speed range is from standstill to more than 2600 fpm, with instantaneous acceleration of empty reel to synchronous wire speed as soon as crossover is made. No interruption or slow down in the winding process is necessary to shift from full to empty reel.



All drives, for reels, capstan and traverse, are hydraulic and completely self-contained with enclosed, oil-immersed gears. Hydraulically driven traverse provides a 25 to 1 lay range. Reel mounting with demountable shaft and bearing housing carried by a heavy duty mounting on a lever-operated, tilting base permits loaded reels to be deposited gently on the floor upon the reel flanges. Unit is offered complete and also without the capstan or with separate floor mounted capstan and tension stand.

Check No. 3 on Reply Card for more Details

Wheel Equipped Extinguisher

Offered with a 150-pound power capacity for combating flammable liquid and electrical fires is a wheeled dry chemical fire extinguisher, made by Walter Kidde & Co. Inc., 10 E. 34th St., New York 16, N. Y. Unit is balanced to permit one-man mobility and incorporates two upright steel cylinders, the larger containing 150 pounds of chemical while the smaller holds nitrogen under pressure of about 2000 psi.

To operate, the valve on top of the nitrogen cylinder is opened, admitting the gas to the powder chamber through a normally open valve and pressurizing the dry chemical for discharge. A preset regulator maintains constant pressure within the dry chemical cylinder during discharge. On the end of a 50-foot hose carried in a bracket on the side of the powder cylinder is a discharge nozzle with stirrup type lever control with "off", "fan", and "straight",

positions for control of the powder stream.

Check No. 4 on Reply Card for more Details

Oiling System Feed Valves

Line of angle sight feed valves made by Oil-Rite Corp., Milwaukee 15, Wis., permits a manufacturer to build his own oiling system of the pressure or gravity type at a considerably lower cost. Valves have free flow characteristics and allow flow of oil to be visually checked and closely regulated. They are available in two types, SFG single or SFM gang mounted. They're equipped with needle valve control and regulate oil flow from full to complete shut-off.

Three body sizes machined from bar stock are available, with inlet of ⅛ to ¼-inch female pipe thread and outlets from ⅛ to ½-inch female pipe thread or compression fittings. Unbreakable plastic sights or glass are available for the sight chamber. In a multiple setup oil fed to each bearing can be individually adjusted and observed at one station. They can be furnished with any number ranging from 2 to 24. Female pipe thread inlet and compression fittings are suitable for ¼-inch OD tubing.

Check No. 5 on Reply Card for more Details

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PICKS IT UP: Towmotor Corp., Cleveland 10, O., offers a hydraulic scoop accessory for models LT-35, LT-40, 44 and 48 lift trucks. It swiftly picks up, transports and dumps bulk materials such as coal, sand, cement, scrap. Actuated by a powerful two-way hydraulic cylinder, the accessory offers positive, finger-tip control of the angle of the scoop.

Check No. 6 on Reply Card for more Details

STARTER WITH LIGHT: Motor Sentinel class 10-023, equipped with an indicating light to show when the motor is running, is available from Westinghouse Electric Corp., Pittsburgh 30, Pa. Especially useful for starting and protecting small alternating and direct current motors used for fans, pumps, compressors, etc., it is available as a double pole switch with ratings up to 1 hp, 250 v, ac or dc.

Check No. 7 on Reply Card for more Details

PORTABLE PUMP: Model 2187, a close-coupled electric motor and pump unit, is introduced by Jabsco Pump Co., Burbank, Calif. Unit consists of a bronze self-priming pump with neoprene impeller with 1½-inch inlet and outlet ports designed to accommodate standard female hose couplings mounted direct on shaft of a ¼-hp Wagner, 1725 rpm, 115 v, 60 cycle, single phase capacitor motor.

Check No. 8 on Reply Card for more Details

ACID PROOFS FLOORS: Phenoline, made by Carboline Co., St. Louis 5, Mo., is a brush-on phenol formaldehyde coating that hardens at room temperature. It resists organic and inorganic acids, except nitric acid. It can be used on wood as well as concrete floors.

Check No. 9 on Reply Card for more Details

FAST TACKING: Improved model H2B stapling hammer, announced by Bostitch, Westerly, R. I., is designed for high speed tacking and light nailing jobs. Improvements include plating for rust resistance, new style driving lever for better balance and new type pusher to eliminate jams.

Check No. 10 on Reply Card for more Details

CONTROLS TEMPERATURE: Series 4700 Atcotronic input controller, made by Automatic Temperature Control Co. Inc., Philadelphia 44, Pa., will automatically control temperature on electrically heated equipment such as furnaces, ovens, pots, kilns, etc. Based on the rate of charge and discharge of a capacitor, this circuit enables the user to "line-out" without incurring undue overshoot.

Check No. 11 on Reply Card for more Details

UNIVERSAL JOINT: Lo Friction universal joint, developed by Curtis Universal Joint Co. Inc., Springfield, Mass., is available in single or double joint form; 1½-inch OD or larger, solid or bored hubs; round, keyed or splined shafts. It is primarily for applications where joint friction heat or kinetic energy must be dissipated rapidly.

Check No. 12 on Reply Card for more Details

SELF - SEALING STUD: Donear Products Co., Rockford, Ill., announces self-sealing tank studs that are arranged with pipe thread on one end and standard screw thread on the remainder of its length. Studs are provided with a hollow head for a hex wrench.

Check No. 13 on Reply Card for more Details

FIXTURE BASES: Three fixture bases, developed by Engineers Specialties Division, Buffalo 9, N. Y., can be used on American Optical projection comparators, Kodak contour projectors and all models of Jones and Lamson optical comparators, except model VC-14. Under-surfaces of the bases are hollowed out to give clearance for screw heads which attach the workholding fixtures, or permits easy machining for underside bearing surface if slide type fixtures are desired.

Check No. 14 on Reply Card for more Details

MOISTURE-FREE SURFACE: Hydrolift, an original water displacing compound has been developed by London Chemical Co., Chicago 5, Ill., to insure a chemically moisture-free surface on all metals. Used as a cold dip, it instantly forms a molecular film, even in the deepest crevices, lifting the moisture to the surface where it runs off. When dry, the film is transparent and can neither be seen nor felt.

Check No. 15 on Reply Card for more Details

PLASTIC TUBING: Cyclon crystal clear flexible plastic tubing, introduced by Munray Products Inc., Cleveland 11, O., is a new medium for the conducting of all types of solutions in a variety of applications. Extruded to various diameters and wall thicknesses, it can be utilized interchangeably for pressure and vacuum operations.

Check No. 16 on Reply Card for more Details

ELECTRIC DRILLS: Models 283, 2101, 2103 and 2121 electric drills introduced by Skilsaw Inc., Chicago 30, Ill., range in capacity from ½ to ¾-inch in steel and up to 1½-inch in hardwood. All models have die-cast aluminum alloy housings, oversize ball bearings, needle bearings, helical gears and geared chucks. Morse taper sockets are available in place of geared chucks.

Check No. 17 on Reply Card for more Details

SHUT-OFF VALVE: A new design in shut-off valves for use in hot air applications of temperatures up to 800° F has been developed by Hydro-Aire Inc., Burbank, Calif. It has an ambient temperature range from minus 65° F to plus 700° F and operates on voltage from 14 to 30 v, dc. Valve is normally open but will close if current fails.

Check No. 18 on Reply Card for more Details

FOR MORE INFORMATION
on the new products and equipment in this section, fill in a card. It will receive prompt attention.

The Market Outlook

DEMAND pressure on the steel mills is mounting. Signs are appearing of an easing in civilian goods production, but there is far more commercial demand before the market than producers can handle. Meanwhile, national emergency requirements are stepping up steadily, though not to the extent anticipated. Increasing tonnages of steel moving into defense channels are intensifying shortages in virtually all civilian products.

SUPPLY—Steady deterioration in supply for the general market is indicated in the months immediately ahead. Consumers, desperate for tonnage, are scrambling all over the map seeking supplies. Gray market offerings, a large part imported steel, and conversion tonnage provide only limited relief. The mills have closed their schedules for March and are booked several weeks beyond on DO-rated orders for some products. At the same time there is a growing disposition among producers to accept more than minimum quotas of rated tonnage inasmuch as mandatory enlargement of such quotas is in early prospect. The bar set-aside already has been upped from 5 to 10 per cent.

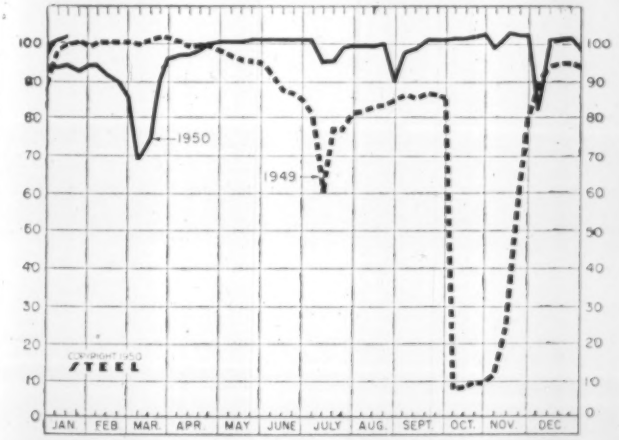
PRODUCTS—Structural steel orders are lagging because of inability of fabricators to obtain sufficient shapes to meet all prospective requirements. Some shops are booked more than a year ahead, largely because of limited steel receipts. Pressure for plates is unabated, and is increasing, particularly for railroad cars, oil and gas lines and tanks. Slightly less pressure is noted for the light, flat-rolled products, significant of an easing in production of household appliances. But specifications continue heavy with demand far in excess of supply and with defense-rated orders gaining. Demand for galvanized sheets taxes mill capacity, while emergency requirements of electrical and stainless sheets are extremely heavy.

ALLOCATIONS—With the steel shortage growing, pressure is rising for adoption of a distribution system similar to the Controlled Materials Plan of World War II. However, such action does not appear likely in the immediate future. So far as can be learned the government plans to worry along with the voluntary allocation system for the present at least. Extension of voluntary allocations to additional programs is in the offing, however. Machinery and equipment builders are seeking tonnage and large new ship requirements loom on the horizon. The petroleum industry will require a heavy volume of steel products of all kinds. Farm machinery builders have been assured they will be provided sufficient steel to maintain production at the 1950 level.

CAPACITY—Steelmakers have lifted their sights on producing capacity. Current capacity is estimated at 104 million tons, increase of 4 million tons since a year ago. Under way or projected are substantial expansions which will lift steelmaking capacity to above 115 million net tons by the end of 1952.

PRICES—All of the iron and steel markets held steady last week. Action by the economic control authorities is expected soon, but whether a rollback of steel prices is contemplated is unknown. Generally it is believed current price levels stand a good chance of being named as ceiling. STEEL's weighted index on finished steel is unchanged at the revised figure of 171.92 as is the arithmetical composite at $105.55. Pig iron is steady with No. 2 foundry, $52.54, basic, $52.16, and malleable $53.27. Pending outcome of price discussions in Washington the scrap market is marking time, the steelmaking grade price composite holding at $45.50.

NATIONAL STEELWORKS OPERATIONS



DISTRICT INGOT RATES

Percentage of Capacity Engaged at Leading Production Points

	Week Ended Jan. 13	Change	Same Week 1950	Same Week 1949
Pittsburgh	98	+ 0.5	98	98.5
Chicago	101.5	+ 2*	98	99.5
Eastern Pa.	100	0	86	95
Youngstown	105	1	102	105
Wheeling	95	1	100	92.5
Cleveland	101.5	+ 0.5	98.5	96.5
Buffalo	104	0	103.5	104
Birmingham	100	0	100	100
New England	83	0	83	86
Cincinnati	92	— 5	96	99
St. Louis	95	+ 7.5	86.5	80
Detroit	107	+ 1	107	105
Western	102	+ 9.5	92	...
Estimated national rate	102	+ 1	94	99

Based on weekly steelmaking capacity of 1,928,721 net tons for 1951 and second half, 1950; 1,906,268 tons for first half, 1950; 1,843,516 tons for 1949; 1,802,476 tons for 1948.

*Change from revised rate.

The Metalworking Outlook—p. 25 *Production-Engineering News*—p. 101

Composite Market Averages

	Jan. 11 1951	Week Ago	Month Ago	Year Ago	5 Yrs. Ago
FINISHED STEEL INDEX, Weighted:					
Index (1935-39 av.=100)	171.92	171.92*	167.89	156.13	101.87
Index in cents per lb.	4.657	4.657*	4.548	4.230	2.760
ARITHMETICAL PRICE COMPOSITES:					
Finished Steel, NT	$103.35	$103.25*	$103.50	$92.86	$58.27
No. 2 Fdry. Pig Iron, GT	52.54	52.54	52.54	46.22	25.42
Basic Pig Iron, GT	52.16	52.16	52.16	45.72	24.75
Malleable Pig Iron, GT	55.27	55.27	55.27	47.27	26.04
Steelmaking Scrap, GT	45.00	45.00	45.00	26.83	19.17

* Revised.

Weighted finished steel index based on average shipments and Pittsburgh district prices of the following 14 representative products during 5-year base period 1935-39. Structural shapes, plates, rails, hot-rolled and cold-finished bars, pipe, wire, nails, tin plate, hot and cold-rolled sheets, galvanized sheets, hot and cold-rolled strip. For complete explanation see STEEL, Sept. 19, 1949, p. 54.

Arithmetical steel price composite based on same products as the weighted finished steel index with the exception of rails, cold-finished bars, galvanized sheets and hot-rolled strip.

Basic and No. 2 foundry pig iron composites are based on average prices at Pittsburgh, Bethlehem, Birmingham, Buffalo, Chicago, Cleveland, Granite City, Youngstown, Malleable composite based on same points, except Birmingham.

Steelmaking scrap composite based on average prices of No. 1 heavy melting steel at Pittsburgh, Chicago and Philadelphia.

Comparison of Prices

Comparative prices by districts, in cents per pound except as otherwise noted. Delivered prices based on nearest production point.

FINISHED MATERIALS

	Jan. 11 1951	Week Ago	Month Ago	Year Ago	5 Yrs. Ago
Bars, H.R., Pittsburgh	3.70	3.70	3.70	3.45	2.25
Bars, H.R., Chicago	3.70	3.70	3.70	3.45	2.25
Bars, H.R., del. Philadelphia	4.18	4.18	4.18	3.93	2.57
Bars, C.F., Pittsburgh	4.55	4.55	4.55	4.10-15	2.75
Shapes, Std., Pittsburgh	3.65	3.65	3.65	3.40	2.10
Shapes, Std., Chicago	3.65	3.65	3.65	3.40	2.10
Shapes, del. Philadelphia	3.90	3.90	3.90	3.46	2.215
Plates, Pittsburgh	3.70	3.70	3.70	3.50	2.25
Plates, Chicago	3.70	3.70	3.70	3.50	2.25
Plates, Coatesville, Pa.	4.15	4.15	4.15	3.60	2.25
Plates, Sparrows Point, Md.	3.70	3.70	3.70	3.50	2.25
Plates, Claymont, Del.	4.15	4.15	4.15	3.60	2.25
Sheets, H.R., Pittsburgh	3.60-75	3.60-75	3.60-75	3.35	2.20
Sheets, H.R., Chicago	3.60	3.60	3.60	3.35	2.20
Sheets, C.R., Pittsburgh	4.35	4.35	4.35	4.10	3.05
Sheets, C.R., Chicago	4.35	4.35	4.35	4.00	3.00
Sheets, C.R., Detroit	4.55	4.55	4.55	4.20	3.15
Sheets, Galv., Pittsburgh	4.80	4.80	4.80	4.40	3.70
Strip, H.R., Pittsburgh	3.75-4.00	3.75-4.00	3.75-4.00	3.25	2.10
Strip, H.R., Chicago	3.50	3.50	3.50	3.25	2.10
Strip, C.R., Pittsburgh	4.65-5.35	4.65-5.35	4.65-5.35	4.15	2.80
Strip, C.R., Chicago	4.50-90	4.50-90	4.50-90	4.00-15	2.90
Strip, C.R., Detroit	4.35-5.60	4.35-5.60	4.35-5.60	4.20-40	2.90
Wire, Basic, Pittsburgh	4.85-5.10	4.85-5.10	4.85-5.10	4.50	2.75
Nails, Wire, Pittsburgh	5.90-6.20	5.90-6.20	5.90-6.20	5.30	2.90
Tin plate, box, Pittsburgh	$8.70	$8.70	$7.50	$7.50	$5.00

SEMIFINISHED

Billets, forging, Pitts. (NT)	$66.00	$66.00	$66.00	$63.00	$42.00
Wire rods, $\frac{7}{32}$-$\frac{9}{32}$", Pitts.	4.10-30	4.10-30	4.10-30	3.85	2.15

PIG IRON, Gross Ton

Bessemer, Pitts.	$53.00	$53.00	$53.00	$47.00	$26.25
Basic, Valley	52.00	52.00	52.00	46.00	25.25
Basic, del. Phila.	56.39	56.39	56.39	49.44	27.09
No. 2 Fdry, Pitts.	52.50	52.50	52.50	46.50	25.75
No. 2 Fdry, Chicago	52.50	52.50	52.50	46.50	25.75
No. 2 Fdry, Valley	52.50	52.50	52.50	46.50	25.75
No. 2 Fdry, Del. Phila.	56.89	56.89	56.89	49.94	27.59
No. 2 Fdry, Birm.	48.88	48.88	48.88	39.88-42.38	22.13
No. 2 Fdry (Birm.) del. Cin.	55.58	55.58	55.58	46.08	25.81
Malleable Valley	52.50	52.50	52.50	46.50	25.75
Malleable, Chicago	52.50	52.50	52.50	46.50	25.75
Charcoal, Lyles, Tenn.	66.00	66.00	66.00	60.00	33.00
Ferromanganese, Etna, Pa.	188.00	188.00	188.00	175.00	140.00*

* Delivered, Pittsburgh.

SCRAP, Gross Ton

No. 1 Heavy Melt, Pitts.	$46.50	$46.50	$46.50	$30.00	$20.00
No. 1 Heavy Melt, E. Pa.	45.00	45.00	45.00	23.50	18.75
No. 1 Heavy Melt, Chicago	45.00	45.00	45.00	27.00	18.75
No. 1 Heavy Melt, Valley	46.25	46.25	46.25	30.25	20.00
No. 1 Heavy Melt, Cleve.	45.75	45.75	45.75	27.25	19.50
No. 1 Heavy Melt, Buffalo	44.88	44.88	44.88	27.75	19.25
Rails, Rerolling, Chicago	67.00	67.00	67.00	39.50	22.25
No. 1 Cast, Chicago	62.00	63.00	63.00	38.50	20.00

COKE, Net Ton

Beehive, Furn., Connlsvl.	$14.75	$14.75	$14.75	$13.25	$7.50
Beehive, Fdry., Connlsvl.	17.50	17.50	16.75	15.50	8.25
Oven Fdry., Chicago	21.00	21.00	21.00	20.00	13.00

NONFERROUS METALS

Copper, del. Conn.	24.50	24.50	24.50	18.50	12.00
Zinc, E. St. Louis	17.50	17.50	17.50	9.75-10.00	8.25
Lead, St. Louis	16.80	16.80	16.80	11.80	6.35
Tin, New York	173.00	157.00	142.00	77.00	52.00
Aluminum, del.	19.00	19.00	19.00	17.00	15.00
Antimony, Laredo, Tex.	32.00	32.00	32.00	32.00	14.50
Nickel, refinery, duty paid	50.50	50.50	50.50	40.00	35.00

Pig Iron

For key to producing companies, turn next page.
Minimum delivered prices do not include 3% federal tax.

PIG IRON Gross Ton

	Basic	No. 2 Foundry	Malleable	Bessemer
Bethlehem,Pa. B2	$54.00	$54.50	$55.00	$55.50
Brooklyn,N.Y.,del.	....	58.79	59.29	....
Newark,del.	56.63	57.13	57.63	58.13
Philadelphia,del.	56.39	56.89	57.39	57.89
Birmingham District				
AlabamaCity,Ala. R2	48.38	48.88	....	....
Birmingham R2	48.38	48.88	....	....
Birmingham S9	48.38	48.88	....	....
Woodward,Ala. W15	48.38	48.88	....	....
Cincinnati,del.	....	55.58	....	....
Buffalo District				
Buffalo R2	52.00	52.50	53.00	....
Buffalo H1	52.00	52.50	53.00	....
Tonawanda,N.Y., W12	52.00	52.50	53.00	....
No.Tonawanda,N.Y., T9	....	52.50	53.00	....
Boston,del.	61.26	61.76	62.26	....
Rochester,N.Y., del.	54.63	55.13	55.63	....
Syracuse,N.Y.,del.	56.58	56.08	56.58	....
Chicago District				
Chicago I-3	52.00	52.50	52.50	53.00
Gary,Ind. U5	52.00	....	52.50	....
IndianaHarbor,Ind. I-2	52.00	....	52.50	....
So.Chicago,Ill. W14	52.00	52.50	52.50	....
So.Chicago,Ill., Y1	52.00	52.50	52.50	....
So.Chicago,Ill. U5	52.00	....	52.50	53.00
Milwaukee,del.	53.89	54.39	54.39	54.89
Muskegon,Mich.,del.	....	57.98	57.98	....
Cleveland District				
Cleveland A7	52.00	52.50	52.50	53.00
Cleveland R2	52.00	52.50	52.50	....
Akron, del. from Cleve.	54.39	54.89	54.89	54.39
Lorain,O. N3	52.00	....	....	53.00
Duluth I-3	....	....	52.50	....
Erie,Pa. I-3	52.00	52.50	52.50	53.00
Everett,Mass. E1	....	53.25	53.75	....
Fontana,Calif. K1	58.00	58.50	....	....
Geneva,Utah G1	52.00	52.60	....	....
Seattle,Tacoma,Wash.,del.	....	60.20	....	....
Portland,Oreg.,del.	....	60.20	....	....
LosAngeles,SanFrancisco,del.	59.70	60.20	....	....
GraniteCity,Ill. M10	53.90	54.40	54.90	....
St.Louis,del. (inc. tax)	54.65	55.15	55.65	....
Ironton,Utah C11	52.00	52.50	....	....
LoneStar,Tex. L6	48.00	*48.50	48.50	....
Minnequa,Colo. C10	54.00	55.00	55.00	....
Pittsburgh District				
NevilleIsland,Pa. P6	....	52.50	52.50	53.00
Pitts.,N&S. sides, Ambridge, Aliquippa,del.	....	53.69	53.69	54.19
McKeesRocks,del.	....	53.45	53.45	53.95
Lawrenceville,Homestead, McKeesport,Monaca,del.	....	53.94	53.94	54.44
Verona,del.	....	54.40	54.40	54.90
Brackenridge,del.	....	54.63	54.63	55.13
Bessemer,Pa. U5	52.00	....	52.50	53.00
Clairton,Rankin,So.Duquesne,Pa. U5	52.00	....	....	....
McKeesport,Pa. N3	52.00	....	....	53.00
Monessen,Pa. P7	54.00	....	....	....
Sharpsville,Pa. S6	....	....	52.50	53.00
Steelton,Pa. B2	54.00	54.50	55.00	55.50
Swedeland,Pa. A3	56.00	56.50	57.00	57.50
Toledo,O. I-3	52.00	52.50	52.50	53.00
Cincinnati,del.	57.01	57.51	....	....
Troy,N.Y. R2	54.00	54.50	55.00	55.50
Youngstown District				
Hubbard,O. Y1	52.00	52.50	52.50	....
Youngstown Y1	52.00	52.50	52.50	....
Youngstown U5	52.00	....	....	53.00
Mansfield,O.,d.	56.26	56.76	56.76	57.26

* Low phos, southern grade.

PIG IRON DIFFERENTIALS

Silicon: Add 50 cents per ton for each 0.25% Si over base grade, 1.75-2.25%.

Phosphorus: Deduct 38 cents per ton for P content of 0.70% and over.

Manganese: Add 50 cents per ton for each 0.50% manganese over 1%, or portion thereof.

Nickel: Under 0.50% no extra; 0.50-0.74%, incl., add $2 per ton and each additional 0.25%, add $1 per ton.

BLAST FURNACE SILVERY PIG IRON, Gross Ton

(Base 6.00-6.50% silicon; add $1.50 for each 0.5% Si)

Jackson,O. G2, J1	$62.58
Buffalo H1	63.75

ELECTRIC FURNACE SILVERY PIG IRON, Gross Ton

(Base 14.01-14.50% silicon; add $1 for each 0.5% Si to 18%; $1 for each 0.5% Mn over 1%; $1 for each 0.045% max. P)

NiagaraFalls,N.Y. P15	$83.00
Keokuk,Iowa, Openhearth & Fdry. frt, allowed K2	92.50
Keokuk, OH & Fdry., 12½ lb. pigiets, 16% Si, frt. allowed K2	95.50
Wenatchee,Wash., O.H. & Fdry., frt. allowed K2	92.50

CHARCOAL PIG IRON, Gross Ton

(Low phos, semi-cold blast; differential charged for silicon over base grade; also for hard chilling iron Nos. 5 & 6)

Lyles,Tenn. T3	$66.00

LOW PHOSPHOROUS PIG IRON, Gross Ton

Cleveland, intermediate, A7	$57.00
Steelton,Pa. B2	60.00
Philadelphia delivered	63.00
Troy,N.Y. R2	60.00

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Semifinished and Finished Steel Products

Mill prices as reported to STEEL Jan. 11, 1951; cents per pound except as otherwise noted. Changes shown in italics. Code numbers following mill points indicate producing company; key on next two pages.

INGOTS, Carbon, Forging (NT)
Fontana,Calif. K1 ....$79.00
Munhall,Pa. U5 .....52.00

INGOTS, Alloy (NT)
Detroit R7 .....$54.00
Fontana,Calif. K1 ....80.00
Houston,Tex. S5 .....62.00
Midland,Pa. C18 .....54.00
Munhall,Pa. U5 .....54.00
So.Duquesne,Pa. U5 ..54.00

BILLETS, BLOOMS & Slabs
Carbon, Rerolling (NT)
Bessemer,Pa. U5 ....$56.00
Clairton,Pa. U5 .....56.00
Ensley,Ala. T2 .....56.00
Fairfield,Ala. T2 .....56.00
Fontana,Calif. K1 ....75.00
Gary,Ind. U5 .....56.00
Johnstown,Pa. B2 ....56.00
Lackawanna,N.Y. B2 ..56.00
Munhall,Pa. U5 .....56.00
So.Chicago,Ill. U5 ....56.00
So.Duquesne,Pa. U5 ..56.00

Carbon, Forging (NT)
Bessemer,Pa. U5 ....$66.00
Buffalo R2 .....66.00
Canton,O. R2 .....66.00
Clairton,Pa. U5 .....66.00
Cleveland R2 .....66.00
Conshohocken,Pa. A3 ..73.00
Detroit R7 .....69.00
Ensley,Ala. T2 .....66.00
Fairfield,Ala. T2 .....66.00
Fontana,Calif. K1 ....85.00
Gary,Ind. U5 .....66.00
Geneva,Utah G1 .....66.00
Houston,Tex. S5 .....74.00
Johnstown,Pa. B2 ....66.00
Lackawanna,N.Y. B2 ..66.00
LosAngeles B3 .....85.00
Munhall,Pa. U5 .....66.00
Seattle B3 .....85.00
So.Chicago R2, U5 ....66.00
So.Chicago W14 .....63.00
So.Duquesne,Pa. U5 ..66.00
So.SanFrancisco B3 ..85.00

Alloy, Forging (NT)
Bethlehem,Pa. B2 ....$70.00
Buffalo R2 .....70.00
Canton,O. R2 .....70.00
Canton,O.(29) T7 ....66.00
Conshohocken,Pa. A3 ..77.00
Detroit R7 .....73.00
Fontana,Calif. K1 ....89.00
Gary,Ind. U5 .....70.00
Houston,Tex. S5 .....78.00
Ind.Harbor,Ind. Y1 ....66.00
Johnstown,Pa. B2 ....70.00
Lackawanna,N.Y. B2..70.00
LosAngeles B3 .....90.00
Massillon,O. R2 .....70.00
Midland,Pa. C18 .....70.00
Munhall,Pa. U5 .....70.00
So.Chicago R2, U5 ...70.00
So.Chicago W14 .....66.00
So.Duquesne,Pa. U5 ...70.00
Warren,O. C17 .....70.00

ROUNDS, SEAMLESS TUBE (NT)
Canton,O. R2 .....$82.00
Cleveland R2 .....82.00
Fontana,Calif. K1 ....103.00
Gary,Ind. U5 .....82.00
Massillon,O. R2 .....82.00
So.Chicago,Ill. R2 ....82.00
So.Duquesne,Pa. U5 ...82.00

SHEET BARS (NT)
Fontana,Calif. K1 ...$89.00

SKELP
Aliquippa,Pa. J5 .....3.45
Munhall,Pa. U5 .....3.35
Warren,O. R2 .....3.35
Youngstown R2, U5 ...3.35

WIRE RODS
AlabamaCity,Ala. R2 ..4.10
Buffalo W12 .....4.10
Cleveland A7 .....4.10
Donora,Pa. A7 .....4.10
Fairfield,Ala. T2 .....4.10
Fontana,Calif. K1 ....4.90
Houston,Tex. S5 .....4.50
Johnstown,Pa. B2 ....4.10
Joliet,Ill. A7 .....4.10
LosAngeles B3 .....4.90
Minnequa,Colo. C10 ....4.35
Monessen,Pa. P7 .....4.30
No.Tonawanda,N.Y.B11 4.10
Pittsburg,Calif. C11 ....4.75
Portsmouth,O. P12 ....4.30
Roebling,N.J. R5 .....4.20
So.Chicago,Ill. R2 ....4.10
SparrowsPoint,Md. B2..4.20
Sterling,Ill.(1) N15 ....4.10
Struthers,O. Y1 .....4.10
Torrance,Calif. C11 ....4.90
Worcester A7 .....4.40

STRUCTURALS
Carbon Steel Stand. Shapes
AlabamaCity,Ala. R2 ...3.60
Aliquippa,Pa. J5 .....3.65
Bessemer,Ala. T2 .....3.65
Bethlehem,Pa. B2 .....3.70
Clairton,Pa. U5 .....3.65
Fairfield,Ala. T2 .....3.65
Fontana,Calif. K1 .....4.25
Gary,Ind. U5 .....3.65
Geneva,Utah G1 .....3.65
Houston,Tex. S5 .....4.05
Ind.Harbor,Ind. I-2 ....3.65
Johnstown,Pa. B2 .....3.70
KansasCity,Mo. S5 ....4.25
Lackawanna,N.Y. B2 ..3.70
LosAngeles B3 .....4.25
Minnequa,Colo. C10 ....4.10
Munhall,Pa. U5 .....3.65
Niles,Calif.(22) P1 ....4.85
Phoenixville,Pa. P4 ....4.95
Portland,Oreg. O4 .....4.50
Seattle B3 .....4.30
So.Chicago,Ill. U5, W14 3.65
So.SanFrancisco B3 ....4.20
Torrance,Calif. C11 ....4.25
Weirton,W.Va. W6 .....3.90

Alloy Stand. Shapes
Clairton,Pa. U5 .....4.35
Fontana,Calif. K1 .....5.55
Munhall,Pa. U5 .....4.35
So.Chicago,Ill. U5 .....4.35

H.S., L.A. Stand. Shapes
Aliquippa,Pa. J5 .....5.50
Bessemer,Ala. T2 .....5.50
Bethlehem,Pa.(14) B2 ..5.50
Clairton,Pa. U5 .....5.50
Fairfield,Ala. T2 .....5.50
Fontana,Calif. K1 .....6.10
Gary,Ind. U5 .....5.50
Geneva,Utah G1 .....5.50
Ind.Harbor,Ind. I-2 ....5.50
Ind.Harbor,Ind. Y1 ....6.00
Johnstown,Pa. B2 .....5.50
Lackawanna,N.Y.(14)B2 5.50
LosAngeles B3 .....6.05
Munhall,Pa. U5 .....5.50
Seattle B3 .....6.10
So.Chicago,Ill. U5 .....5.50
So.SanFrancisco B3 ....6.00
Struthers,O. Y1 .....6.00

Wide Flange
Bethlehem,Pa. B2 .....3.70
Fontana,Calif. K1 .....4.65
Lackawanna,N.Y. B2 ...3.70
Munhall,Pa. U5 .....3.65
So.Chicago,Ill. U5 .....3.65

H.S., L.A. Wide Flange
Bethlehem,Pa. B2 .....5.50
Lackawanna,N.Y. B2 ...5.50
Munhall,Pa. U5 .....5.45
So.Chicago,Ill. U5 .....5.45

SHEET STEEL PILING
Ind.Harbor,Ind. I-2 ...4.45
Lackawanna,N.Y. B2 ...4.45
Munhall,Pa. U5 .....4.45
So.Chicago,Ill. U5 ....4.45

BEARING PILES
Munhall,Pa. U5 .....3.65
So.Chicago,Ill. U5 .....3.65

PLATES, High-Strength Low-Alloy
Aliquippa,Pa. J5 .....5.65
Bessemer,Ala. T2 .....5.65
Clairton,Pa. U5 .....5.65
Cleveland J5, R2 .....5.65
Conshohocken,Pa. A3 ..5.90
Ecorse,Mich. G5 .....5.85
Fairfield,Ala. T2 .....5.65
Fontana,Calif.(30) K1 ..6.25
Gary,Ind. U5 .....5.65
Geneva,Utah G1 .....5.65
Ind.Harbor,Ind. I-2 ...5.65
Ind.Harbor,Ind. Y1 ....6.15
Johnstown,Pa. B2 .....5.65
Munhall,Pa. U5 .....5.65
Pittsburgh J5 .....5.65
Seattle B3 .....6.55
Sharon,Pa. S3 .....5.70
So.Chicago,Ill. U5 .....5.65
SparrowsPoint,Md. B2 ..5.65
Warren,O. R2 .....5.65
Youngstown Y1 .....6.15

PLATES, Open-Hearth Alloy
Claymont,Del. W16 .....4.85
Coatesville,Pa. L7 ....5.25
Conshohocken,Pa. A3 ..5.05
Fontana,Calif. K1 .....5.70
Gary,Ind. U5 .....4.75
Johnstown,Pa. B2 .....4.75
Munhall,Pa. U5 .....4.75
Sharon,Pa. S3 .....5.20
So.Chicago,Ill. U5 .....4.75
SparrowsPoint,Md. B2..4.75

FLOOR PLATES
Cleveland J5 .....4.75
Conshohocken,Pa. A3 ...4.75
Harrisburg,Pa. C5 .....5.95
Ind.Harbor,Ind. I-2 ...4.75
Munhall,Pa. U5 .....4.75
So.Chicago,Ill. U5 .....4.75

PLATES, Carbon A.R.
Fontana,Calif. K1 .....5.45
Geneva,Utah G1 .....4.85

PLATES, Carbon Steel
AlabamaCity,Ala. R2 ..3.70
Aliquippa,Pa. J5 .....3.70
Ashland,Ky.(15) A10 ..3.70
Bessemer,Ala. T2 .....3.70
Clairton,Pa. U5 .....3.70
Claymont,Del. W16 .....4.15
Cleveland J5, R2 .....3.70
Coatesville,Pa. L7 .....4.15
Conshohocken,Pa. A3 ..4.15
Ecorse,Mich. G5 .....3.75
Fairfield,Ala. T2 .....3.70
Fontana,Calif.(30) K1 ..4.30
Gary,Ind. U5 .....3.70
GraniteCity,Ill. G4 .....4.40
Geneva,Utah G1 .....3.70
Harrisburg,Pa. C5 .....4.95
Houston,Tex. S5 .....4.10
Ind.Harbor,Ind. I-2, Y1.3.70
Johnstown,Pa. B2 .....3.70
Lackawanna,N.Y. B2 ...3.70
Minnequa,Colo. C10 ....4.30
Munhall,Pa. U5 .....3.70
Pittsburgh J5 .....3.70
Seattle B3 .....4.60
Sharon,Pa. S3 .....3.95
So.Chicago,Ill. U5, W14.3.70
SparrowsPoint,Md. B2..3.70
Steubenville,O. W10 ....3.70
Warren,O. R2 .....3.70
Weirton,W.Va. W6 .....4.00
Youngstown R2, U5, Y1.3.70

PLATES, Wrought Iron
Economy,Pa. B14 .....8.60

PLATES, Ingot Iron
Ashland,c.l.(15) A10 ..3.95
Ashland,lcl.(15) A10 ..4.45
Cleveland,c.l. R2 .....4.30
Warren,O. c.l. R2 .....4.30

BARS, Hot-Rolled Carbon
AlabamaCity,Ala. R2 ...3.70
Aliquippa,Pa. J5 .....3.70
Alton,Ill.(1) L1 .....3.45
Atlanta,Ga. A11 .....4.25
Bessemer,Ala. T2 .....3.70
Buffalo R2 .....3.70
Canton,O. R2 .....3.70
Clairton,Pa. U5 .....3.70
Cleveland R2 .....3.70
Detroit R7 .....3.85
Ecorse,Mich. G5 .....3.65
Emeryville,Calif. J7 ....4.45
Fairfield,Ala. T2 .....3.70
Fontana,Calif. K1 .....4.40
Gary,Ind. U5 .....3.70
Houston,Tex. S5 .....4.10
Ind.Harbor,Ind. I-2, Y1.3.70
Johnstown,Pa. B2 .....3.70
KansasCity,Mo. S5 ....4.30
Lackawanna,N.Y. B2 ...3.70
LosAngeles B3 .....4.40
Milton,Pa. B6 .....4.20
Minnequa,Colo. C10 ....4.15
Niles,Calif. P1 .....5.05
N.Tonawanda,N.Y. B11.3.40
Pittsburg,Calif. C11 ....4.40
Pittsburgh J5 .....3.70
Portland,Oreg. O4 .....4.65
Seattle B3, N14 .....4.45
So.Chicago R2, U5, W14.3.70
So.Duquesne,Pa. U5 ....3.70
So.SanFran.,Cal. B3 ....4.45
Struthers,O. Y1 .....3.70
Torrance,Calif. C11 ....4.40
Weirton,W.Va. W6 .....3.85
Youngstown R2, U5 ....3.70

BAR SIZE ANGLES; S. SHAPES
Aliquippa,Pa. J5 .....3.70
Atlanta A11 .....4.25
Johnstown,Pa. B2 .....3.70
Lackawanna,N.Y. B2 ...3.70
Niles,Calif. P1 .....5.05
Portland,Oreg. O4 .....4.65
SanFrancisco S7 .....4.85

BAR SIZE ANGLES; H.R.CARBON
Bethlehem,Pa. B2 .....3.90

BARS, Hot-Rolled Alloy
Bethlehem,Pa. B2 .....4.30
Buffalo R2 .....4.30
Canton,O. R2 .....4.30
Canton,O.(29) T7 .....3.95
Clairton,Pa. U5 .....4.30
Detroit R7 .....4.45
Ecorse,Mich. G5 .....4.25
Fontana,Calif. K1 .....5.35
Gary,Ind. U5 .....4.30
Houston,Tex. S5 .....4.70
Ind.Harbor,Ind. I-2, Y1.4.30
Johnstown,Pa. B2 .....4.30
KansasCity,Mo. S5 ....4.90
Lackawanna,N.Y. B2 ...4.30
LosAngeles B3 .....5.35
Massillon,O. R2 .....4.30
Midland,Pa. C18 .....4.30
So.Chicago R2, U5, W14.4.30
So.Duquesne,Pa. U5 ....4.30
Struthers,O. Y1 .....4.30
Warren,O. C17 .....4.30
Youngstown U5 .....4.30

BAR SHAPES, Hot-Rolled Alloy
Clairton,Pa. U5 .....4.55
Gary,Ind. U5 .....4.55
Youngstown U5 .....4.55

BARS & SMALL SHAPES, H.R., High-Strength Low-Alloy
Aliquippa,Pa. J5 .....5.55
Atlanta A11 .....5.35
Bessemer,Ala. T2 .....5.55
Bethlehem,Pa. B2 .....5.55
Clairton,Pa. U5 .....5.55
Cleveland R2 .....5.55
Ecorse,Mich. G5 .....5.65
Fairfield,Ala. T2 .....5.55
Fontana,Calif. K1 .....6.60
Gary,Ind. U5 .....5.55
Ind.Harbor,Ind. I-2 .....5.55
IndianaHarbor,Ind. Y1..6.05
Johnstown,Pa. B2 .....5.55
Lackawanna,N.Y. B2 ...5.55
LosAngeles B3 .....6.25
Pittsburgh J5 .....5.55
Seattle B3 .....6.30
So.Duquesne,Pa. U5 ....5.55
So.SanFrancisco B3 ....6.30
Struthers,O. Y1 .....6.05
Youngstown U5 .....5.55

BARS, Cold-Finished Carbon
Ambridge,Pa. W18 .....4.55
BeaverFalls,Pa.M12,R2 ..4.55
Buffalo B5 .....4.60
Camden,N.J. P13 .....5.00
Carnegie,Pa. C12 .....4.55
Chicago W18 .....4.55
Cleveland A7, C20 .....4.55
Detroit P17 .....4.70
Donora,Pa. A7 .....4.55
Ecorse,Mich. G5 .....4.35
Elyria,O. W8 .....4.55
FranklinPark,Ill. N5 ....4.55
Gary,Ind. R2 .....4.55
GreenBay,Wis. F7 .....4.55
Hammond,Ind. L2 M13.4.55
Hartford,Conn. R2 .....5.10
Harvey,Ill. B5 .....4.55
LosAngeles R2 .....6.00
Mansfield,Mass. B5 ....5.10
Massillon,O. R2, R8 ....4.55
Midland,Pa. C18 .....4.55
Monaca,Pa. S17 .....4.55
Newark,N.J. W18 .....5.00
Plymouth,Mich. P5 .....4.80
Pittsburgh J5 .....4.55
Putnam,Conn. W18 .....5.10
Readville,Mass. C14 ....5.10
St. Louis,Mo. M5 .....4.95
So.Chicago,Ill. W14 .....4.55
SpringCity,Pa.(5) K3 ...5.00
Struthers,O. Y1 .....4.55
Waukegan,Ill. A7 .....4.55
Youngstown F3, Y1 .....4.55

BARS, Cold-Finished Alloy
Ambridge,Pa. W18 .....5.40
BeaverFalls,Pa. M12 ....5.40
Bethlehem,Pa. B2 .....5.40
Buffalo B5 .....5.40
Camden,N.J. P13 .....5.80
Canton,O. R2 .....5.40
Canton,O.(29) T7 .....4.90
Carnegie,Pa. C12 .....5.40
Chicago W18 .....5.40
Cleveland A7 .....5.45
Cleveland C20 .....5.40
Detroit P17 .....5.55
Donora,Pa. A7 .....5.45
Elyria,O. W8 .....5.40
Gary,Ind. R2 .....5.40
Hammond,Ind. L2, M13 .5.40
Hartford,Conn. R2 .....5.85
Harvey,Ill. B5 .....5.40
Lackawanna,N.Y. B2 ...5.40
Mansfield,Mass. B5 .....5.85
Massillon,O. R2, R8 ....5.40
Midland,Pa. C18 .....5.40
Monaca,Pa. S17 .....5.40
Newark,N.J. W18 .....5.75
Plymouth,Mich. P5 .....5.60
So.Chicago,Ill. R2, W14.5.40
Struthers,O. Y1 .....5.40
Warren,O. C17 .....5.40
Waukegan,Ill. A7 .....5.45
Worcester,Mass. A7 .....5.75
Youngstown F3, Y1 .....5.40

RAIL STEEL BARS
ChicagoHts.(3,4)I-2, C2.4.75
Dallas,Tex.(4) S20 .....6.00
Franklin,Pa.(3,4) F5 ....4.75
FortWorth,Tex.(26) T4..4.63
Huntngtn,W.Va.(3) W7 .5.50
Marion,O.(3) P11 .....4.75
Moline,Ill.(3) R2 .....3.80
Tonawanda(3,4) B12 ....4.75
Williamsport(3) S19 ....5.00
Williamsport(4) S19 ....5.10

BARS, Wrought Iron
Dover,N.J.(Staybolt)U1 15.00
Dover(Eng.Bolt) U1 ...13.50
Dover(Wrgt.Iron) U1 ...12.25
Economy,Pa.(S.R.) B14.9.60
Economy,Pa.(D.R.)B14 11.90
Economy(Staybolt)B14 12.20
McK.Rks.(Staybolt) L5.14.50
McK.Rks.(S.R.) L5 ...9.60
McK.Rks.(D.R.) L5 ...13.00

BARS, Reinforcing (Fabricators)
AlabamaCity,Ala. R2 ...3.70
Alton,Ill.(6) L1 .....3.45
Atlanta A11 .....4.20
Buffalo R2 .....3.70
Cleveland R2 .....3.70
Emeryville,Calif. J7 ....4.45
Fairfield,Ala. T2 .....3.70
Fontana,Calif. K1 .....4.40
Gary,Ind. U5 .....3.70
Houston,Tex. S5 .....4.10
Ind.Harbor,Ind. I-2, Y1.3.70
Johnstown,Pa. B2 .....3.70
KansasCity,Mo. S5 ....4.30
Lackawanna,N.Y. B2 ...3.70
LosAngeles B3 .....4.40
Milton,Pa. B6 .....4.20
Minnequa,Colo. C10 ....4.30
Niles,Calif. P1 .....5.05
Pittsburg,Calif. C11 ....4.40
Pittsburgh J5 .....3.70
Portland,Oreg. O4 .....4.65
SandSprings,Okla. S5 ..4.60
Seattle B3, N14 .....4.45
So.Chicago,Ill. R2 .....3.70
So.Duquesne,Pa. U5 ....3.70
So.SanFrancisco B3 ....4.45
SparrowsPoint,Md. B2 ..3.70
Struthers,O. Y1 .....3.70
Torrance,Calif. C11 ....4.40
Youngstown R2, U5 ....3.70

BARS, Reinforcing
(Fabricated; to Consumers)
Huntington,W.Va. W7 ...5.50
Johnstown, ¾-1" B2 ....4.75
LosAngeles B3 .....5.45
Marion,O. P11 .....5.00
Seattle B3, N14 .....5.55
So.SanFrancisco B3 ....5.45
SparrowsPt. ¾-1" B2. 4.75
Williamsport,Pa. S19 ...5.10

SHEETS, Hot-Rolled Steel
(18 gage and heavier)
AlabamaCity,Ala. R2 ...3.60
Ashland,Ky.(8) A10 ....3.60
Butler,Pa. A10 .....3.60
Cleveland J5, R2 .....3.60
Conshohocken,Pa. A3 ...4.00
Detroit M1 .....4.40
Ecorse,Mich.(8) G5 ....3.80
Fairfield,Ala. T2 .....3.60
Fontana,Calif. K1 .....4.55
Gary,Ind. U5 .....3.60
Geneva,Utah G1 .....3.70
GraniteCity,Ill. G4 .....4.30
Ind.Harbor,Ind. I-2, Y1.3.60
Irvin,Pa. U5 .....3.60
Lackawanna,N.Y. B2 ...3.60
Munhall,Pa. U5 .....3.60
Niles,O. N12 .....5.25
Pittsburg,Calif. C11 ....4.30
Pittsburgh J5 .....3.60
Sharon,Pa. S3 .....4.00
So.Chicago,Ill. W14 ....3.60
SparrowsPoint,Md. B2 ..3.60
Steubenville,O. W10 ....3.60
Torrance,Calif. C11 ....4.30
Warren,O. R2 .....3.60
Weirton,W.Va. W6 .....3.60
WestLeechburg,Pa. A4 ..3.75
Youngstown U5, Y1 .....3.60

SHEETS, H-R (19 gage)
AlabamaCity,Ala. R2 ...4.75
Dover,O. R1 .....5.65
Ind.Harbor,Ind. I-2 .....5.40
Mansfield,O. E6 .....5.65
Niles,O. N12 .....5.75
Torrance,Calif. C11 ....5.40

SHEETS, H-R (14-ga., heavier) High-Strength Low-Alloy
Cleveland J5, R2 .....5.40
Conshohocken,Pa. A3 ...5.65
Ecorse,Mich. G5 .....5.50
Fairfield,Ala. T2 .....5.40
Fontana,Calif. K1 .....6.35
Gary,Ind. U5 .....5.40
Ind.Harbor,Ind. I-2 .....5.40
IndianaHarbor,Ind. Y1..5.90
Irvin,Pa. U5 .....5.40
Lackawanna(35) B2 ....5.40
Pittsburgh J5 .....5.40
Sharon,Pa. S3 .....5.40
So.Chicago,Ill. U5 .....5.40
SparrowsPoint(36) B2 ..5.40
Warren,O. R2 .....5.40
Weirton,W.Va. W6 .....5.75
Youngstown U5 .....5.40
Youngstown Y1 .....5.90

SHEETS, Cold-Rolled High-Strength Low-Alloy
Cleveland J5, R2 .....6.55
Ecorse,Mich. G5 .....6.65
Fontana,Calif. K1 .....7.50
Gary,Ind. U5 .....6.55
IndianaHarbor,Ind. Y1 .7.05
Indiana Harbor,Ind. I-2 .6.55
Irvin,Pa. U5 .....6.55
Lackawanna(37) B2 ....6.55
Pittsburgh J5 .....6.55
SparrowsPoint(38) B2 ..6.55
Warren,O. R2 .....6.55
Weirton,W.Va. W6 .....6.90
Youngstown Y1 .....7.05

SHEETS, Cold-Rolled Steel (Commercial Quality)

Butler,Pa. A10	4.35
Cleveland J5, R2	4.35
Ecorse,Mich. G5	4.35
Fairfield,Ala. T2	4.35
Follansbee,W.Va. F4	5.35
Fontana,Calif. K1	5.30
Gary,Ind. U5	4.35
GraniteCity,Ill. G4	5.05
Ind.Harbor,Ind. I-2, Y1	4.35
Irvin,Pa. U5	4.35
Lackawanna,N.Y. B2	4.35
Middletown,O. A10	4.35
Pittsburg,Calif. C11	5.30
Pittsburgh J5	4.35
SparrowsPoint,Md. B2	4.35
Steubenville,O. W10	4.35
Warren,O. R2	4.35
Weirton,W.Va. W6	4.35
Youngstown Y1	4.35

SHEETS, Galv'd No. 10 Steel

AlabamaCity,Ala. R2	4.80
Ashland,Ky.(8) A10	4.80
Canton,O. R2	4.80
Dover,O. R1	5.50
Fairfield,Ala. T2	4.80
Gary,Ind. U5	4.80
GraniteCity,Ill. G4	5.50
Ind.Harbor,Ind. I-2	4.80
Irvin,Pa. U5	4.80
Kokomo,Ind.(13) C16	5.20
MartinsFerry,O. W10	4.80
Niles,O. N12	6.00
Pittsburg,Calif. C11	5.50
SparrowsPoint,Md. B2	4.80
Steubenville,O. W10	4.80
Torrance,Calif. C11	5.55
Weirton,W.Va. W6	4.80

SHEETS, Galvanized No. 10, High-Strength Low Alloy

Irvin,Pa. U5	7.20
SparrowsPoint(39) B2	6.75

SHEETS, Galvannealed Steel

Canton,O. R2	5.35
Irvin,Pa. U5	5.35
Kokomo,Ind.(13) C16	5.75
Niles,O. N12	6.55

SHEETS, ZINCGRIP Steel No. 10

Butler,Pa. A10	5.05
Middletown,O. A10	5.05

SHEETS, Electro Galvanized

Cleveland R2 (28)	5.65
Niles,O. R2 (28)	5.65
Weirton,W.Va. W6	5.50

SHEETS, Zinc Alloy

Ind.Harbor,Ind. I-2	5.70

SHEETS, Long Terne Steel (Commercial Quality)

BeechBottom,W.Va.W10	5.20
Gary,Ind. U5	5.20
Mansfield,O. E6	6.05
Middletown,O. A10	5.20
Niles,O. N12	6.00
Weirton,W.Va. W6	5.20

SHEETS, Long Terne, Ingot Iron

Middletown,O. A10	5.60

MANUFACTURING TERNES (Special Coated)

Fairfield,Ala. T2	$7.60
Gary,Ind. U5	7.50
Irvin,Pa. U5	7.50
SparrowsPoint,Md. B2	7.60
Yorkville,O. W10	7.60

SHEETS, Lt. Coated Ternes, 6lb

Yorkville,O. W10	$8.40

SHEETS, Mfg. Ternes, 8 lb (Commercial Quality)

Gary,Ind. U5	$9.50
Warren,O. R2	9.50
Yorkville,O. W10	9.50

ROOFING SHORT TERNES (Package; 8 lb coated)

Gary,Ind. U5	$17.50

BLUED Stock, 29 Ga.

Yorkville,O. W10	6.80
Follansbee,W.Va.(23) F4	6.80

SHEETS, Culvert No. 16 Corrugated Ingot Iron

	Cu Alloy	Cu Fe
Ashland,Ky. A10	5.60	
Canton,O. R2	5.65	6.10
Fairfield,Ala. T2	5.60	5.85
Gary,Ind. U5	5.60	5.85
IndianaHarbor I-2	5.60	5.85
Irvin,Pa. U5	5.60	5.85
Kokomo C16	6.25	
MartinsFy.O. W10	5.60	5.85
Pittsburg,Cal. C11	6.35	
SparrowsPt. B2	5.60	
Torrance,Cal. C11	6.35	

SHEETS, Culvert, No. 16 Corrugated Ingot Iron

Ashland,Ky. A10	5.85
Fairfield,Ala. T2	5.60

SHEETS, Hot-Rolled Ingot Iron 18 Gage and Heavier

Ashland(8) A10	3.85
Cleveland R2	4.20
Ind.Harbor,Ind. I-2	3.85
Warren,O. R2	4.20

SHEETS, Cold-Rolled Ingot Iron

Cleveland R2	4.95
Middletown,O. A10	4.85
Warren,O. R2	4.95

SHEETS, Galvanized Ingot Iron No. 10 flat

Ashland,Ky.(8) A10	5.05
Canton,O. R2	5.55

SHEETS, ZINCGRIP Ingot Iron

Butler,Pa. A10	5.30
Middletown,O. A10	5.30

SHEETS, Enameling Iron

Ashland,Ky.(8) A10	4.65
Cleveland R2	4.65
Ecorse,Mich. G5	4.70
Gary,Ind. U5	4.65
GraniteCity,Ill. G4	5.35
Ind.Harbor,Ind. I-2	4.65
Irvin,Pa. U5	4.65
Middletown,O. A10	4.65
Youngstown Y1	4.65

SHEETS, Drum Body

Pittsburg,Calif. C11	4.30
Torrance,Calif. C11	4.30

SHEETS, Well Casing

Fontana,Calif. K1	5.10
Torrance,Calif. C11	5.10

SHEETS, ALUMINIZED

Butler,Pa. A10	8.15

TIN PLATE, Electrolytic (Base Box)

	0.25 lb	0.50 lb	0.75 lb
Aliquippa,Pa. J5	$7.15	$7.40	$7.80
Fairfield,Ala. T2	7.25	7.50	7.90
Gary,Ind. U5	7.15	7.40	7.80
GraniteCity,Ill. G4	7.35	7.60	8.00
Ind.Harbor,Ind. I-2, Y1	7.15	7.40	7.80
Irvin,Pa. U5	7.15	7.40	7.80
Niles,O. R2	7.15	7.40	7.80
Pittsburg,Calif. C11	7.90	8.15	8.40
SparrowsPoint,Md. B2	7.25	7.50	7.90
Weirton,W.Va. W6	7.15	7.40	7.80
Yorkville,O. W10	7.15	7.40	7.80

SHEETS, SILICON, H.R. or C.R. (22 Ga.) COILS (Cut Lengths 1½c lower)

	Field	Armature	Electric	Motor	Dynamo
BeechBottom,W10 (cut lengths)			7.25	8.50	9.30
Brackenridge,Pa. A4			7.75	9.00	9.80
GraniteCity,Ill.G4 (cut lengths)			7.95	9.20	
Ind.Harbor,Ind. I-2	6.95	7.25	(34)		
Mansfield,O. E6 (cut lengths)	7.10	7.25	7.75	9.00	9.80
Niles,O. N12 (cut lengths)		6.75	7.25		
Vandergrift,Pa. U5		7.25	7.75	9.00	9.80
Warren,O. R2	6.95	7.25	7.75	9.00	9.80
Zanesville,O. A10		7.25	7.75	9.00	9.80

SHEETS, SILICON (22 Ga. Base) Coils (Cut Lengths 1½c lower)

Transformer Grade	72	65	58	52
BeechBottom W10 (cut lengths)	9.85	10.40	11.10	11.90
Brackenridge,Pa. A4	10.35			
Vandergrift,Pa. U5	10.35	10.90	11.60	12.40
Warren,O. R2	10.35			
Zanesville,O. A10	10.35	10.90	11.60	12.40

H.R. or C.R. COILS AND CUT LENGTHS, SILICON (22 Ga.)

	T-100	T-90	T-80	T-73
Butler,Pa. A10 (C.R.)			14.75	15.25
Vandergrift,Pa. U5	12.90	13.75	14.75	15.25

TIN PLATE, American Coke (Base Box)

	1.25 lb	1.50 lb
Aliquippa,Pa. J5	$8.45	$8.40
Fairfield,Ala. T2	8.55	8.50
Gary,Ind. U5	8.45	8.40
Ind.Har. I-2, Y1	8.45	8.40
Irvin,Pa. U5	8.45	8.40
Pitts.,Cal. C11	9.20	9.40
Sparr.,Md. B2	8.50	8.50
Warren,O. R2	8.45	8.40
Weirton,W.Va. W6	8.45	8.70
Yorkville,O. W10	8.45	8.70

CANMAKING BLACK PLATE (Base Box)

Aliquippa,Pa. J5	$6.25
Fairfield,Ala. T2	6.35
Gary,Ind. U5	6.25
GraniteCity,Ill. G4	6.45
Ind.Harbor,Ind. I-2, Y1	6.25
Irvin,Pa. U5	6.25
Niles,O. R2	6.25
Pittsburg,Calif. C11	7.00
SparrowsPoint,Md. B2	6.30
Warren,O. R2	6.25
Weirton,W.Va. W6	6.25
Yorkville,O. W10	6.25

HOLLOWARE ENAMELING Black Plate (29 gage)

Follansbee,W.Va. F4	5.85
Gary,Ind. U5	5.85
GraniteCity,Ill. G4	6.05
Ind.Harbor,Ind. Y1	5.30
Irvin,Pa. U5	5.85
Yorkville,O. W10	6.15

STRIP, Hot-Rolled, High-Strength Low-Alloy

Atlanta(9) A11	3.10
Bessemer,Ala. T2	5.30
Conshohocken,Pa. A3	5.55
Ecorse,Mich. G5	5.40
Fairfield,Ala. T2	5.30
Fontana,Cal. K1	6.20
Gary,Ind. U5	5.30
Ind.Harbor,Ind. I-2	5.30
IndianaHarbor,Ind. Y1	5.80
Lackawanna,N.Y. B2	4.95
LosAngeles(25) B3	6.05
Seattle B3	6.30
Sharon,Pa. S3	5.40
So.SanFrancisco(25) B3	6.05
SparrowsPoint,Md. B2	4.95
Warren,O. R2	4.95
Weirton,W.Va. W6	5.45
Youngstown Y1	5.80
Youngstown U5	5.30

STRIP, Cold-Rolled, High-Strength Low-Alloy

Cleveland A7, J5	6.70
Dover,O. G6	7.30
Ecorse,Mich. G5	6.65
Fontana,Calif. K1	6.95
Lackawanna,N.Y. B2	6.40
Sharon,Pa. S3	6.55
SparrowsPoint,Md. B2	6.40
Warren,O. R2	6.55
Weirton,W.Va. W6	7.20
Youngstown Y1	7.05

STRIP, Cold-Rolled Alloy Steel

Bridgeprt,Conn.(10) S15	10.10
Carnegie,Pa. S18	10.60
Cleveland A7	10.60
Dover,O. G6	10.50
Fontana,Calif. K1	11.65
Harrison,N.J. C18	10.60
NewBritn,Conn.(10) S15	10.10
Pawtucket,R.I.(11) NS	10.75
Pawtucket,R.I.(12) NS	11.05
Sharon,Pa. S3	10.60
Worcester,Mass. A7	10.30
Youngstown C8	10.60

STRIP, Cold-Rolled Ingot Iron

Warren,O. R2	5.25

STRIP, Hot-Rolled Carbon

Ala.City,Ala.(26) R2	3.50
Alton,Ill.(1) L1	3.25
Ashland,Ky.(8) A10	3.50
Atlanta A11	4.00
Bessemer,Ala. T2	3.50
Bridgeprt,Conn.(10) S15	4.00
Buffalo(27) R2	3.50
Butler,Pa. A10	3.50
Carnegie,Pa. S18	4.00
Conshohocken,Pa. A3	3.90
Detroit M1	4.40
Ecorse,Mich. G5	3.45
Fairfield,Ala. T2	3.50
Fontana,Calif. K1	4.45
Gary,Ind. U5	3.50
Houston,Tex. S5	4.90
Ind.Harbor,Ind. I-2, Y1	3.50
Johnstown,Pa.(25) B2	3.50
KansasCity,Mo.(9) S5	4.10
Lackawanna,N.Y.(32) B2	3.50
LosAngeles B3	4.25
Milton,Pa. B6	4.00
Minnequa,Colo. C10	4.55
NewBritain(10) S15	4.00
N.Tonawanda,N.Y. B11	3.50
Pittsburg,Calif. C11	4.25
Riverdale,Ill. A1	3.50
SanFrancisco S7	4.85
Seattle B3, N14	4.50
Sharon,Pa. S3	4.00
So.Chicago,Ill. W14	3.50
So. San Francisco B3	4.25
SparrowsPoint,Md. B2	3.50
Torrance,Calif. C11	4.25
Warren,O. R2	3.50
Weirton,W.Va. W6	3.60
WestLeechburg,Pa. A4	3.75
Youngstown U5, Y1	3.50

STRIP, Electro Galvanized

Cleveland A7	4.65
Dover,O. G6	5.50
Warren,O. T5	5.25
Weirton,W.Va. W6	4.65
Youngstown C8	5.25

TIGHT COOPERAGE HOOP

Atlanta A11	4.05
Riverdale,Ill. A1	3.90
Sharon,Pa. S3	4.15
Youngstown U5	3.75

STRIP, Cold-Finished, Spring Steel (Annealed)

	0.26-0.40C	0.41-0.60C	0.61-0.80C	0.81-1.05C	1.06-1.35C
Berea,O. C4		6.80	7.40	9.35	11.65
Bridgeport,Conn.(10) S15	5.35	6.80	7.40	9.35	11.65
Bristol,Conn. W1			7.70	9.65	
Carnegie,Pa. S18		6.80	7.40	9.35	11.65
Cleveland A7	4.65	6.45	7.40	9.35	11.65
Dearborn,Mich. D3	5.60	7.05	7.65		
Detroit D2	5.60	6.65	7.25		
Dover,O. G6	5.50	6.80	7.40	9.35	11.65
Franklin,Park,Ill. T6	5.00	6.60	7.55	9.50	11.80
Harrison,N.J. C18			7.70	9.65	11.95
Mattapan,Mass. T6	5.50	6.75	7.70	9.65	11.95
NewBritn.,Conn.(10) S15	5.35	6.80	7.40	9.35	11.65
NewCastle,Pa. B4	5.35	6.80	7.40	9.35	
NewCastle,Pa. E5	5.50	6.80	7.40	9.35	11.65
NewHaven,Conn. D2	5.85	6.75	7.35		
NewYork W3		7.10	7.70	9.65	11.95
Pawtucket,R.I. NS: Cleve-or-Pitts.Base		6.80	7.40	9.35	11.65
Worcester,Base	5.85	7.10	7.70	9.65	11.95
Sharon,Pa. S3	5.35	6.80	7.40	9.35	11.65
Trenton,N.J. R5		7.10	7.70	9.65	11.95
Wallingford,Conn. W2	5.85	6.75	7.35	9.20	11.60
Weirton,W.Va. W6	5.35	6.80	7.40	9.35	11.65
Worcester,Mass. A7	4.95	6.75	7.70	9.65	11.95
Worcester,Mass. T6	5.50	6.75	7.70	9.65	11.95
Youngstown C8		6.80	7.40	9.35	11.65

Spring Steel (Tempered)

Trenton,N.J. R5		10.30	12.50	15.35
Harrison,N.J. C18		10.30	12.50	15.35
NewYork W3		10.30	12.50	15.35

STRIP, Cold-Rolled Carbon

Anderson,Ind.(40) G6	5.50
Berea,O. C7	5.60
Bridgeprt,Conn.(10)	5.35
Butler,Pa. A10	4.85
Cleveland A7, J5	4.85
Dearborn,Mich. D3	5.60
Detroit D2	5.60
Detroit M1	5.45
Dover,O.(40) G6	5.50
Ecorse,Mich. G5	4.85
Follansbee,W.Va. F4	5.35
Fontana,Calif. K1	6.50
Franklin Park,Ill.(40) T6	4.90
Ind.Harbor,Ind. I-2	4.85
Lackawanna,N.Y. B2	4.85
LosAngeles C1	6.40
Mattapan,Mass. T6	5.50
Middletown,O. A10	4.85
NewBritain(10) S15	5.35
NewCastle,Pa. B4	5.35
NewCastle(40) E5	5.25
NewHaven,Conn. D2	5.85
NewHaven,Conn. A7	5.15
Pawtucket,R.I. R3	6.00
Pawtucket,R.I.(21) NS	5.85
Riverdale,Ill.(40) A1	4.90
Rome,N.Y. R6	5.10
Sharon,Pa. S3	5.35
SparrowsPoint,Md. B2	4.65
Trenton,N.J. R5	6.00
Wallingford,Conn. W2	5.85
Warren,O.(40) T5	5.25
Warren,O. R2	4.65
Weirton,W.Va. W6	4.65
WestLeechburg,Pa. A4	4.65
Youngstown C8, (40)	5.25
Youngstown Y1	4.65

STRIP, Hot-Rolled Alloy

Bridgeprt,Conn.(10) S15	5.45
Carnegie,Pa. S18	5.85
Fontana,Calif. K1	6.70
Gary,Ind. U5	5.50
Houston,Tex. S5	5.90
KansasCity,Mo. S5	6.10
NewBritn,Conn.(10) S15	5.45
Sharon,Pa. S3	5.85
Youngstown U5	5.50

STRIP, Hot-Rolled Ingot Iron

Ashland,Ky.(8) A10	3.75
Warren,O. R2	4.10

Key to Producing Companies

A1 Acme Steel Co.	
A3 Alan Wood Steel Co.	
A4 Allegheny Ludlum Steel	
A7 AmericanSteel & Wire	
A8 Anchor Drawn Steel Co.	
A9 Angell Nail & Chaplet	
A10 Armco Steel Corp.	
A11 Atlantic Steel Co.	
A13 American Cladmetals Co.	
B1 Babcock & Wilcox Tube	
B2 Bethlehem Steel Co.	
B3 Beth. Pac. Coast Steel	
B4 Blair Strip Steel Co.	
B5 Bliss & Laughlin Inc.	
B6 Boardi Steel Corp.	
B8 Braeburn Alloy Steel	
B11 Buffalo Bolt Co.	
B12 Buffalo Steel Co.	
B14 A. M. Byers Co.	
C1 Calif. Cold Rolled Steel	
C2 Calumet Steel Div., Borg-WarnerCorp.	
C4 Carpenter Steel Co.	
C5 Central Iron & Steel Div. Barium Steel Corp.	
C7 Cleve.Cold.Roll.Mills Co.	
C8 Cold Metal Products Co.	
C9 Colonial Steel Co.	
C10 Colorado Fuel & Iron	
C11 Columbia Steel Co.	
C12 Columbia Steel & Shaft.	
C13 Columbia Tool Steel Co.	
C14 Compressed Steel Shaft	
C16 Continental Steel Corp.	
C17 Copperweld Steel Co.	
C18 Crucible Steel Co.	
C19 Cumberland Steel Co.	
C20 Cuyahoga Steel & Wire	
D2 Detroit Steel Corp.	
D3 Detroit Tube & Steel	
D4 Disston & Sons, Henry	
D6 Driver Harris Co.	
D7 Dickson Weatherproof Nail Co.	
E1 Eastern Gas&Fuel Assoc.	
E2 Eastern Stainless Steel	
E4 Electro Metallurgical Co.	
E5 Elliott Bros. Steel Co.	
E6 Empire Steel Corp.	
F2 Firth Sterling Steel	
F3 Fitzsimons Steel Co.	
F4 Follansbee Steel Corp.	
F5 Franklin Steel Div., Borg-Warner Corp.	
F6 Fretz-Moon Tube Co.	
F7 Ft. Howard Steel & Wire	
G1 Geneva Steel Co.	
G2 Globe Iron Co.	
G3 Globe Steel Tubes Co	
G4 Granite City Steel Co.	
G5 Great Lakes Steel Corp	
G6 Greer Steel Co.	
H1 Hanna Furnace Corp.	
H4 Heppenstall Co.	
I-1 Igoe Bros. Inc.	
I-2 Inland Steel Co.	
I-3 Interlake Iron Corp.	
I-4 Ingersoll Steel Div., Borg-Warner Corp.	
J1 Jackson Iron & Steel Co.	
J3 Jessop Steel Co.	
J4 Johnson Steel & Wire Co	
J5 Jones & Laughlin Steel	
J6 Joslyn Mfg. & Supply	
J7 Judson Steel Corp.	
J8 Jersey Shore Steel Co.	
K1 Kaiser Steel Corp.	
K2 Keokuk Electro-Metals	
K3 Keystone Drawn Steel	
K4 Keystone Steel & Wire	
L1 Laclede Steel Co.	
L2 LaSalle Steel Co.	
L3 Latrobe Electric Steel	
L5 Lockhart Iron & Steel	
L6 Lone Star Steel Co.	
L7 Lukens Steel Co.	

WIRE, Manufacturers Bright, Low Carbon

AlabamaCity,Ala. R2	4.85
Aliquippa,Pa. J5	4.85
Atlanta A11	5.10
Alton,Ill.(1) L1	4.50
Bartonville,Ill.(1) K4	4.85
Buffalo W12	4.85
Chicago W13	4.85
Cleveland A7, C20	4.85
Crawfordsville,Ind. MS	5.10
Donora,Pa. A7	4.85
Duluth A7	4.85
Fairfield,Ala. T2	4.85
Fostoria,O.(24) S1	5.35
Houston S5	5.25
Johnstown,Pa. B2	4.85
Joliet,Ill. A7	4.85
KansasCity,Mo. S5	5.45
Kokomo,Ind. C16	4.95
LosAngeles B3	5.80
Minnequa,Colo. C10	5.10
Monessen,Pa. P7	5.10
NewArk, 6-sga. I-1	5.50
No. Tonawanda B11	4.85
Palmer,Mass. W12	5.15
Pittsburg,Calif. C11	5.80
Portsmouth,O. P12	5.25
Rankin,Pa. A7	4.80
So.Chicago,Ill. R2	4.85
So.SanFrancisco C10	5.80
SparrowsPoint,Md. B2	4.95
Sterling,Ill.(1) N15	4.85
Struthers,O. Y1	4.85
Torrance,Calif. C11	5.80
Waukegan,Ill. A7	4.85
Worcester,Mass. A7, T6	5.15

WIRE, Cold-Rolled Flat

Anderson,Ind. G6	6.20
Buffalo W12	6.35
Cleveland A7	5.85
Crawfordsville,Ind. MS	6.20
Detroit D2	6.20
Dover,O. G6	6.20
Fostoria,O. S1	6.00
Kokomo,Ind. C16	5.70
FranklinPark,Ill. T6	6.20
Massillon,O. R8	5.85
Monessen,Pa. P16	5.85
Monessen,Pa. P7	6.10
NewHaven,Conn. D2	6.50
Pawtucket,R.I.(12) N8	6.85
Trenton,N.J. R5	6.15
Worcester A7	6.00
Worcester T6	6.50
Worcester W12	6.65

WIRE, Galv'd ACSR for Cores

Bartonville,Ill K4	8.50
Monessen,Pa. P16	8.50
Roebling,N.J. R5	8.80
SparrowsPoint,Md. B2	8.25

WIRE, Merchant Quality (6 to 8 gage)

	An'ld	Galv.
AlabamaCity R2	5.40	5.95
Aliquippa J5	5.70	6.15
Atlanta A11	5.95	6.40
Bartonville(19)K4	5.95	6.15
Buffalo W12	4.85	...
Cleveland A7	5.70	6.15
Crawfordsville MS	5.95	6.40
Donora A7	5.70	6.15
Duluth A7	5.70	6.15
Fairfield T2	5.70	6.15
Houston,Tex. S5	6.10	6.55
Johnstown B2	5.70	6.15
Joliet, Ill. A7	5.70	6.15
KansasCy,Mo. S5	6.30	6.75
Kokomo C16	5.80	6.05
LosAngeles B3	6.65	...
Minnequa C10	5.95	6.45
Monessen P7	5.95	6.40
Palmer W12	5.15	...
Pitts.Calif. C11	6.65	6.80
Prtsmth.(18)P12	6.10	6.60
Rankin A7	5.70	6.15
So.Chicago R2	5.70	5.95
So.S.Fran. C10	6.65	7.10
SparrowsPt. B2	5.80	6.25
Sterling,Ill.(1)N15	5.70	6.15
Struthers,O. Y1	5.70	6.15
Torrance,Cal. C11	6.65	...
Worcester A7	6.00	6.45

WIRE (16 gage)

	An'ld Stone	Galv. Stone
Aliquippa J5	10.15	11.85
Bartonville(1) K4	10.25	11.95
Cleveland A7	10.25	12.15
Crawfrdsvie MS	10.30	12.00
Fostoria,O. S1	10.40	13.00
Johnstown B2	*10.25*	*12.15*
Kokomo C16	10.25	11.95
Minnequa C10	10.40	12.40
Palmer,Mass.W12	10.25	12.15
Pitts.,Cal. C11	10.25	12.15
Prtsmth.(18) P12	10.55	12.30
SparrowsPt. B2	*10.35*	*12.25*
Waukegan A7	10.25	12.15

WIRE, Fine & Weaving (8" Coils)

Bartonville,Ill.(1) K4	8.90
Buffalo W12	8.90
Chicago W13	8.90
Cleveland A7	8.90
Crawfordsville,Ind. MS	8.95
Fostoria,O. S1	8.90
Johnstown,Pa. B2	*8.90*
Kokomo,Ind. C16	8.90
Monessen,Pa. P16	8.90
Palmer,Mass. W12	9.20
Portsmouth,O. P12	8.90
Roebling,N.J. R5	9.20
Waukegan,Ill. A7	8.90
Worcester,Mass. A7, T6	9.20

ROPE WIRE	Mild Plow	Plow	Imp. Plow
Bartonville,Ill. K4	8.55	8.55	8.80
Buffalo W12	8.55	8.55	8.80
Cleveland A7	8.55	8.55	8.80
Donora,Pa. A7	8.55	8.55	8.80
Fostoria,O. S1	8.85	8.85	9.10
Johnstown,Pa. B2	*8.55*	*8.55*	*8.80*
Monessen,Pa. P16	8.55	8.55	8.80
Monessen,Pa. P7	8.80	8.80	9.05
NewHaven,Conn. A7	8.85	8.85	9.10
Palmer,Mass. W12	8.85	8.85	9.10
Portsmouth,O. P12	8.55	8.55	8.80
Roebling,N.J. R5	8.85	8.85	9.10
SparrowsPoint,Md. B2	*8.65*	*8.65*	*8.90*
Struthers,O. Y1	8.55	8.55	8.80
Trenton,N.J. A7	8.85	8.85	9.10
Waukegan,Ill A7	8.55	8.55	8.80
Worcester,Mass. J4	8.35	8.35	8.60
Worcester,Mass. T6	8.85	8.85	9.10

WIRE, MB Spring, High Carbon

Aliquippa,Pa. J5	6.25
Alton,Ill.(1) L1	5.90
Bartonville,Ill.(1) K4	6.25
Buffalo W12	6.25
Cleveland A7	6.25
Donora,Pa. A7	6.25
Duluth A7	6.25
Fostoria,O. S1	6.25
Johnstown,Pa. B2	6.25
LosAngeles B3	7.20
Millbury,Mass.(12) N6	8.05
Monessen,Pa. P7, P16	6.25
Palmer,Mass. W12	6.55
Pittsburg,Calif. C11	7.20
Roebling, N.J. R5	6.55
Portsmouth,O. P12	6.25
So.Chicago,Ill. R2	6.25
So.SanFrancisco C10	6.85
SparrowsPoint,Md. B2	6.35
Struthers,O. Y1	6.25
Trenton,N.J. A7	6.55
Waukegan,Ill. A7	6.25
Worcester A7,J4,T6,W12	6.55

WIRE, Upholstery Spring

Aliquippa,Pa. J5	5.90
Alton,Ill.(1) L1	5.55
Buffalo W12	5.90
Cleveland A7	5.90
Donora,Pa. A7	5.90
Duluth A7	5.90
Johnstown,Pa. B2	5.90
LosAngeles B3	6.85
Monessen,Pa. P7, P16	5.90
NewHaven,Conn. A7	6.20
Palmer,Mass. W12	6.20
Pittsburg,Calif. C11	6.85
Portsmouth,O. P12	5.90
Roebling,N.J. R5	6.20
So.Chicago,Ill. R2	5.90
SparrowsPoint,Md. B2	6.00
Torrance,Calif. C11	6.85
Trenton,N.J. A7	6.20
Waukegan,Ill. A7	5.90
Worcester,Mass. A7	6.20

WIRE, Tire Bead

Bartonville,Ill.(1) K4	10.90
Monessen,Pa. P16	11.40
Roebling,N.J. R5	11.55

WIRE, Barbed

	Col.
AlabamaCity,Ala. R2	136
Aliquippa,Pa. J5	140
Atlanta A11	143
Bartonville,Ill.(19) K4	143
Crawfordsville MS	145
Donora,Pa. A7	140
Duluth, Minn. A7	140
Fairfield,Ala. T2	140
Houston,Tex. S5	148
Johnstown,Pa. B2	140
Joliet,Ill. A7	140
KansasCity,Mo. S5	152
Kokomo,Ind C16	142
Minnequa,Colo. C10	146
Monessen,Pa. P7	145
Pittsburg,Calif. C11	160
Portsmouth,O.(18) P12	147
Rankin,Pa. A7	140
So.Chicago,Ill. R2	136
So.SanFran.,Calif. C10	160
SparrowsPoint,Md. B2	142
Sterling,Ill.(1) N15	140

FENCE POSTS

	Col.
ChicagoHts.,Ill. C2	140
Duluth A7	125
Franklin,Pa. F5	140
Huntington,W.Va. W7	130
Johnstown,Pa. B2	*140*
Marion,O. P11	140
Minnequa,Colo. C10	130
Moline,Ill. R2	136
So.Chicago R2	140
Tonawanda B12	140
Williamsport,Pa. S19	150

WOVEN FENCE, 9-15½ Ga.

	Col.
AlabamaCity,Ala. R2	126
Ala.City,Ala.,12-13ga.R2	213
Aliquippa,Pa.9-14½ga.J5	130
Atlanta A11	133
Bartonville,Ill.(19) K4	130
Crawfordsville,Ind. MS	132
Donora,Pa. A7	130
Duluth A7	130
Houston,Tex. S5	138
Fairfield,Ala. T2	130
Johnstown,Pa. B2	130
Johnstown,17ga.,6" B2	204
Johnstown,17ga.,4" B2	207
Joliet,Ill. A7	130
KansasCity,Mo. S5	142
Kokomo,Inds. C16	132
Minnequa,Colo. C10	138
Monessen,Pa. P7	135
Pittsburg,Calif. C11	153
Portsmouth,O.(18) P12	137
Rankin,Pa. A7	130
So.Chicago,Ill. R2	126
Sterling,Ill.(1) N15	130

BALE TIES, Single Loop

	Col.
AlabamaCity,Ala. R2	123
Atlanta A11	126
Bartonville,Ill.(19) K4	123
Chicago W13	123
Crawfordsville MS	132
Donora,Pa. A7	123
Duluth A7	123
Fairfield,Ala. T2	123
Joliet,Ill. A7	123
KansasCity,Mo. S5	135
Kokomo,Ind. C16	125
Minnequa,Colo. C10	128
Pittsburg,Calif. C11	147
So.Chicago,Ill. R2	123
So.SanFran.,Calif. C10	147
SparrowsPoint,Md. B2	125
Sterling,Ill.(1) N15	123

AXLES

Ind.Harbor,Ind. S13	5.60
Johnstown,Pa. B2	5.60

JOINT BARS

Bessemer,Pa. U5	4.70
Fairfield,Ala. T2	4.70
Ind.Harbor,Ind. I-2	4.70
Joliet,Ill. U5	4.70
Lackawanna,N.Y. B2	4.70
Minnequa,Colo. C10	4.70
Steelton,Pa. B2	4.70

TRACK BOLTS (20) Treated

KansasCity,Mo. S5	9.15
Lebanon,Pa.(32) B2	9.85
Minnequa,Colo. C10	9.85
Pittsburgh O3, P14	9.85
Seattle B3	10.10

NAILS & STAPLES, Stock to dealers & mfrs. (7)

	Col.
AlabamaCity,Ala. R2	118
Aliquippa,Pa.(13) J5	118
Atlanta A11	121
Bartonville,Ill.(19) K4	118
Chicago,Ill. W13	130
Cleveland A9	125
Crawfordsville,Ind. MS	122
Donora,Pa. A7	118
Duluth A7	118
Fairfield,Ala. T2	118
Galveston,Tex. D7	126
Houston,Tex. S5	126
Johnstown,Pa. B2	118
Joliet,Ill. A7	118
KansasCity,Mo. S5	130
Kokomo,Ind. C16	120
Minnequa,Colo. C10	123
Monessen,Pa. P7	124
Pittsburg,Calif. C11	137
Portsmouth,O. P12	124
Rankin,Pa. A7	118
So.Chicago,Ill. R2	118
Sparrows Point,Md. B2	120
Sterling,Ill.(1) N15	118
Torrance,Calif. C11	138
Worcester,Mass. A7	124

NAILS & STAPLES, Non-Stock

AlabamaCity,Ala. R2	6.10
Bartonville,Ill.(19) K4	5.95
Crawfordsville,Ind. MS	6.30
Donora,Pa. A7	5.95
Duluth A7	5.95
Johnstown,Pa. B2	5.95
Joliet,Ill. A7	5.95
Kokomo,Ind. C16	6.05
Minnequa,Colo. C10	6.20
Pittsburg,Calif. C11	6.90
Portsmouth,O. P12	6.25
Rankin,Pa. A7	5.95
So.Chicago,Ill. R2	6.10
SparrowsPoint,Md. B2	6.05
Sterling,Ill.(1) N15	5.65
Worcester,Mass. A7	6.25

NAILS, Cut (100 lb keg) To dealers (33)

Colishocken,Pa. A3	$7.35
Wheeling,W.Va. W10	7.15

TIE PLATES

Fairfield,Ala. T2	4.50
Gary,Ind. U5	4.50
Ind.Harbor,Ind. I-2	4.50
Lackawanna,N.Y. B2	4.50
Minnequa,Colo. C10	4.50
Pittsburg,Calif. C11	4.65
Seattle B3	4.65
Steelton,Pa. B2	4.50
Torrance,Calif. C11	4.65

STANDARD TRACK SPIKES

Ind.Harbor,Ind. I-2, Y1	6.15
KansasCity,Mo. S5	6.40
Lebanon,Pa. B2	6.15
Minnequa,Colo. C10	6.15
Pittsburgh J5	6.15
Seattle B3	6.65
So.Chicago,Ill. R2	6.15
Struthers,O. Y1	6.15
Youngstown R2	6.15

RAILS	Std. No. 1	Std. No. 2	Std. All No. 2	TeeRails 60 lb Under
Bessemer,Pa. U5	3.60	3.50	3.55	4.00
Ensley,Ala. T2	3.60	3.50	...	4.00
Fairfield,Ala. T2	...	...	...	4.00
Gary,Ind. U5	3.60	3.50	3.55	...
Huntington,W.Va. W7	...	...	...	5.00
Ind.Harbor,Ind. I-2	3.60	3.50	3.55	...
Johnstown,Pa. B2	...	...	...	(16)4.00
Lackawanna B2	3.60	3.50	...	4.00
Minnequa,Colo. C10	3.60	3.50	...	4.50
Steelton,Pa. B2	3.60	3.50	...	...
Williamsport,Pa. S19	...	...	...	4.75

TOOL STEELS

Grade	Cents per lb	Grade	Cents per lb
Reg. Carbon	23.00	18W,4Cr,3V	140.00
Extra Carbon	27.00	18W,4Cr,2V,9Co	204.00
Spec. Carbon	32.50	19W,4Cr,2V,7Co	264.00
Oil Hardening	35.00	18.25W,4.25Cr,1V,4.75Co	172.00
Cr Hot Wrk	35.00	20.2W,4.25Cr,1.6V,12.25Co	323.00
Hi-Carbon-Cr	63.50	1.5W,4Cr,1V,8.5Mo	78.50
18W,4Cr,1V	110.00	6.4W,4.5Cr,1.9V,5Mo	84.00
18W,4Cr,2V	124.50	6W,4Cr,3V,6Mo	106.50

Tool steel producers include: A4, A8, B2, B8, C4, C6, C13, C18, D4, F2, H4, J3, L3, M14, S8, T2, U4, V2, V3.

Key to Producing Companies

M1 McLouth Steel Corp.
M4 Mahoning Valley Steel
M5 Medart Co.
M6 Mercer Tube & Mfg. Co.
M8 Mid-States Steel & Wire
M9 Midvale Co.
M10 Missouri-Illinois Furnace
M12 Moltrup Steel Products
M13 Monarch Steel Co.
M14 McInnes Steel Co.
N2 National Supply Co.
N3 National Tube Co.
N5 Nelsen Steel & Wire Co.
N6 NewEng.HighCarb.Wire
N8 Newman-Crosby Steel
N12 Niles Rolling Mill Co.
N14 Nrthwst. Steel Roll.Mills
N15 Northwestern S.&W. Co.
N16 New Delphos Mfg. Co.
O3 Oliver Iron & Steel Corp.
O4 Oregon Steel Mills
P1 Pacific States Steel Corp.
P2 Pacific Tube Co.
P4 Phoenix Iron & Steel Co.
P5 Pilgrim Drawn Steel
P6 Pittsburgh Coke&Chem.
P7 Pittsburgh Steel Co.
P9 Pittsburgh Tube Co.
P11 Poilak Steel Co.
P12 Portsmouth Division, Detroit Steel Corp.
P13 Precision Drawn Steel
P14 Pitts.Screw & Bolt Co.
P15 Pittsburgh Metallurgical
P16 Page Steel & Wire Div., Amer. Chain & Cable
P17 Plymouth Steel Co.
R1 Reeves Steel & Mfg. Co.
R2 Republic Steel Corp.
R3 Rhode Island SteelCorp.
R5 Roebling's Sons, John A.
R6 Rome Strip Steel Co.
R7 Rotary Electric Steel Co.
R8 RelianceDiv.,EatonMfg.
S1 Seneca Wire & Mfg. Co.
S3 Sharon Steel Corp.
S5 Sheffield Steel Corp.
S6 Shenango Furnace Co.
S7 Simmons Co.
S8 Simonds Saw & Steel Co.
S9 Sloss-Sheffield,S.&I. Co.
S13 Standard Forgings Corp.
S14 Standard Tube Co.
S15 Stanley Works
S16 Struthers Iron & Steel
S17 Superior Drawn Steel Co.
S18 Superior Steel Corp.
S19 Sweet's Steel Co.
S20 Southern States Steel
T2 Tenn. Coal, Iron & R.R.
T3 Tenn. Prod. & Chem.
T4 Texas Steel Co.
T5 Thomas Steel Co.
T6 Thompson Wire Co.
T7 Timken Roller Bearing
T9 Tonawanda Iron Div. Am. Rad. & Stan. San.
U1 Ulster Iron Works
U4 Universal Cyclops Steel
U5 United States Steel Co.
V2 Vanadium Alloys Steel
V3 Vulcan Crucible Steel Co.
W1 Wallace Barnes Co.
W2 Wallingford Steel Co.
W3 Washburn Wire Corp.
W4 Washington Steel Corp.
W6 Weirton Steel Co.
W7 W. Va. Steel & Mfg.Co.
W8 West Auto.Mach.Screw
W9 Wheatland Tube Co.
W10 Wheeling Steel Corp.
W12 Wickwire Spencer Steel Div., Colo. Fuel & Iron
W13 Wilson Steel & Wire Co.
W14 Wisconsin Steel Div. International Harvester
W15 Woodward Iron Co.
W16 Worth Steel Co.
W18 Wyckoff Steel Co.
Y1 Youngston Sheet&Tube

(1) Chicago base.
(2) Angles, flats, bands.
(3) Merchant. (4) Reinforcing.
(5) Philadelphia del.
(6) Chicago or Birm. base.
(7) To jobbers, 2 cols. lower.
(8) 16 gage and heavier.
(9) 6 in. and narrower.
(10) Pittsburgh base.
(11) Cleveland & Pittsburgh base.
(12) Worcester, Mass. base.
(13) Add 0.50c for 17 Ga & heavier.
(14) Also wide flange beams.
(15) ¼" and thinner.
(16) 40 lb and under.
(17) Flats only.
(18) To dealers.
(19) Chicago & Pittsburgh base.
(20) Deduct 0.25c for untreated.
(21) New Haven, Conn. base.
(22) Del San Fran Bay area.
(23) 26 Ga. 36" wide.
(24) Deduct 0.20c, finer than 15 Ga.
(25) Bar mill basis.
(26) Reinforcing, to fabricators 18" bar elec. furn. billet, 5.00c; to consumers, 5.25c.
(27) Bar mill sizes.
(28) Bonderized.
(29) Subject to 10% increase.
(30) Sheared; add 0.35c for universal mill.
(31) Not annealed.
(32) Rd. edge or square edge.
(33) To jobbers, deduct 20 cents.
(34) 7.25c for cut lengths.
(35) 72" and narrower.
(36) 54" and narrower.
(37) 15 gage & lighter; 60" & narrower.
(38) 14 gage & lighter; 48" & narrower.
(39) 48" and narrower.
(40) Lighter than 0.055"; 0.055" and heavier, 0.25c higher.

STANDARD PIPE, T. & C.

BUTTWELD Size Inches	List Per Ft	Pounds Per Ft	Carload Discounts from List, % —Black— A	B	C	—Galvanized— D	E	F
⅛	5.5c	0.24	34.0	32.0	29.0	1.5	+0.5	0.5
¼	6.0	0.42	28.5	26.5	26.0	+1.0	+3.0	0.5
⅜	6.0	0.57	23.5	21.5	21.5	+7.0	+9.0	4.0
½	8.5	0.85	36.0	34.0	35.0	14.0	12.0	13.0
¾	11.5	1.13	39.0	37.0	38.0	18.0	16.0	17.0
1	17.0	1.68	41.5	39.5	40.5	21.5	19.5	20.5
1¼	23.0	2.28	42.0	44.0	41.0	22.0	24.0	21.0
1½	27.5	2.78	42.5	41.5	41.5	23.0	21.5	22.0
2	37	3.68	48.0	41.0	42.0	23.5	21.5	22.5
2½	58.5	5.82	48.5	41.5	42.5	24.0	22.0	23.0
3	76.5	7.62	43.5	41.5	42.5	24.0	22.0	23.0

Column A: Etna, Pa. N2; Butler, Pa. ⅛-⅜", F6; Benwood, W. Va., 3½ points lower on ⅛", 1½ points lower on ¼", and 2 points lower on ⅜", W10; Sharon, Pa. M6, 1 point higher on ⅛", 2 points lower on ¼", and ⅜"; following make ½" and larger: Lorain, O., N3; Youngstown R2 and 36½% on 3½" and 4"; Youngstown Y1; Aliquippa, Pa. J5. Fontana, Calif. K1 quotes 11½ points lower on ⅛" and larger continuous weld and 24% on 3½" and 4".

Columns B & E: Sparrows Point, Md. B2.

Columns C & F: Indiana Harbor, Ind., ½" through 3", Y1; Alton, Ill. (Lorain base) L1.

Column D: Butler, Pa. F6, ⅛-⅜"; Benwood, W. Va. W10, except plus 3½% on ⅛", plus 2¼% on ¼", plus 9% on ⅜"; Sharon, Pa. M6, plus 0.5 on ⅛", 1 point lower on ½", ¾", 1½ points lower on 1" and 1¼", 2 points lower on 1½", 2", 2½" and 3". Following quote only on ½" and larger: Lorain, O. N3; Youngstown R2, and 16½% on 3½" and 4"; Youngstown Y1; Aliquippa, Pa. J5 quotes 1 point lower on ¾", 2 points lower on 1", 1½ points lower on 1¼", 2 points lower on 1½" and 2", 1½ points lower on 2½" and 3"; Etna, Pa. N2 and 18½% on 3½" and 4".

SEAMLESS AND ELECTRIC WELD Size Inches	List Per Ft	Pounds Per Ft	Carload Discounts from List, % Seamless Black A	Galv. B	Elec. Weld Black C	Galv. D
2	37.0c	3.68	29.5	9.5	29.5	9.5
2½	58.5	5.82	32.5	12.5	32.5	12.5
3	76.5	7.62	32.5	12.5	32.5	12.5
3½	92.0	9.20	34.5	14.5	34.5	14.5
4	$1.09	10.89	34.5	14.5	34.5	14.5
5	1.48	14.81	37.0	17.0	37.0	17.0
6	1.92	19.18	37.0	17.0	37.0	17.0

Column A: Aliquippa J5; Ambridge N2; Lorain N3; Youngstown Y1.

Column B: Aliquippa J5 quotes 11½ pts lower on 2", 1 pt lower on 2½-6 in.; Lorain, N3; Youngstown Y1.

Columns C & D: Youngstown R2.

BOILER TUBES

Net base c.l. prices, dollars per 100 ft, mill; minimum wall thickness, cut lengths 10 to 24 ft, inclusive.

O.D. In.	B.W Ga.	—Seamless— H.R.	C.D.	Elec. Weld H.R.	C.D.
1	13	13.45	16.47	15.36	15.36
1¼	13	16.09	19.71	15.61	18.19
1½	13	17.27	21.15	17.25	20.30
1¾	13	19.29	23.62	19.62	23.09
2	13	21.62	26.48	21.99	25.86
2¼	13	24.35	29.82	24.50	28.84
2½	12	26.92	32.97	26.98	31.76
2¾	12	29.65	36.32	29.57	34.76
3	12	32.11	39.33	31.33	36.84
3½	12	34.00	41.64	32.89	38.70

CLAD STEELS

(Cents per pound)

Cladding Stainless	—Plates— Carbon Base 10%	20%	—Strip— Cold-Rolled Carbon Base 10%	Both Sides	—Sheets— Carbon Base 10%	20%	Cu Base Both Sides
302	....	....	....	....	19.75	27.50	77.00
304	25.00	28.00-29.50	....	....	20.75-24.50	27.50	77.00
309	30.50	35.00	....	....	....	....	....
310	36.50	41.00	....	....	....	....	144.00
316	29.50	31.50-34.00	....	....	26.00	36.50	....
317	34.50	39.00	....	....	....	....	....
318	33.50	38.00	....	....	....	....	....
321	26.50	31.00	....	....	23.00	33.00	111.00
347	27.50	30.50-32.00	....	....	24.00	33.50	130.00
405	21.25	27.75	....	....	....	....	....
410	20.75	27.25	....	....	....	....	....
Nickel	33.25	44.25	41.00	54.00	....	....	....
Inconel	41.00	53.50	....	....	....	....	165.00
Monel	34.75	45.75	....	....	....	....	....
Copper*	....	....	23.70†	29.65‡	....	....	....

* Deoxidized. † 20.20c for hot-rolled. ‡ 26.40c for hot-rolled. Production points for carbon base products: Stainless plates, sheet, Conshohocken, Pa. A3 and New Castle, Ind. I-4; stainless-clad plates, Claymont, Del. W16, Coatesville, Pa. L7 and Washington, Pa. J3; nickel, inconel, monel-clad plates, Coatesville L7; nickel, monel, copper-clad strip, Carnegie, Pa., S18. Production point for copper-base sheets is Carnegie, Pa. A13.

BOLTS, NUTS

CARRIAGE, MACHINE BOLTS

(F.o.b. midwestern plants; per cent off list for less than case lots to consumers)

6 in. and shorter:	
½-in. & smaller diam.	15
⅝-in. & ⅞-in.	18.5
1-in. and larger	17.5
Longer than 6 in.:	
All diams.	14
Lag bolts, all diams.:	
6 in. and shorter	23
over 6 in. long	21
Ribbed Necked Carriage	26
Blank	34
Plow	34
Step, Elevator, Tap, and Sleigh Shoe	21
Tire bolts	12
Boiler & Fitting-Up bolts	31

NUTS

H.P. & C.P.	Reg.	Heavy
Square:		
½-in. & smaller	15	15
⅝-in. & ⅞-in.	12	6.5
1-in.-1½-in.	9	1
1⅝ in. & larger	7.5	1
H.R. Hex.:		
½-in. & smaller	26	22
⅝-in. & ⅞-in.	16.5	6.5
1-in.-1½-in.	12	2
1⅝ in. & larger	8.5	2
C.P. Hex.:		
½-in. & smaller	26	22
⅝-in. & ⅞-in.	23	17.5
1-in. & 1½-in.	19.5	12
1⅝-in. & larger	12	6.5

SEMIFINISHED NUTS

American Standard

(Per cent off list for less than case or keg quantities)

	Hvy.	Reg.
½-in. & smaller	35	28.5
⅝-in. & ⅞-in.	29.5	22
1-in.-1½-in.	24	15
1⅝-in. & larger	13	8.5
Light		
½-in. & smaller		35
⅝-in. to ⅞-in.		28.5
1-in. to 1½-in.		26

STEEL STOVE BOLTS

(F.o.b. plant; per cent off list in packages)

Plain finish .....56 & 10
Plated finishes.....41 & 10

HEXAGON CAP SCREWS

(1020 steel; packaged; per cent off list)

6 in. or shorter:	
⅝-in. & smaller	47
¾-in. through 1 in.	40
Longer than 6 in.:	
⅝-in. & smaller	33
¾-in. through 1 in.	18

SQUARE HEAD SET SCREWS

(Packaged; per cent off list)

1 in. diam. x 6 in. and shorter	44
1 in. and smaller diam. x over 6 in.	33

HEADLESS SET SCREWS

(Packaged; per cent off list)

No. 10 and smaller	41
¼-in. diam. & larger	24
N.F. thread, all diams.	18

RIVETS

F.o.b. midwestern plants
Structural ½-in., larger 7.85c
⅞-in. under ..... 36 off

WASHERS, WROUGHT

F.o.b. shipping point, to jobbers ....List to 50c off

ELECTRODES

(Threaded, with nipples, unboxed, f.o.b. plant)

GRAPHITE

Inches Diam.	Length	Cents per lb
17,18,20	60,72	17.00
7 to 16	48,60,72	17.00
7	48,60	18.64
6	48,60	19.95
4,5½	40	20.48
3	40	21.53
2½	24,30	22.05
2	24,30	24.15

CARBON

40	100,110	7.65
35	100,110	7.65
30	84,110	7.65
24	72 to 104	7.65
17 to 20	34,90	7.65
14	60,72	8.16
10,12	60	8.42

STAINLESS STEEL

Type	Sheets	C.R. Strip	Bars Wire Structurals
301...	41.00	34.00	31.25
302...	41.00	36.50	31.25
303...	43.00	40.00	33.75
304...	43.00	38.50	32.75
309...	55.50	54.50	44.25
316...	56.50	58.50	48.75
321...	49.00	48.00	36.75
347...	53.50	52.00	41.25
410...	36.50	30.50	25.75
416...	37.00	37.00	26.25
420...	44.00	47.00	31.25
430...	39.00	31.00	26.25
501...	27.50	26.00	14.25
502...	28.50	27.00	15.25

Brackenridge, Pa., sheets A4.

Bridgeville, Pa., bars, wire, sheets & strip U4.

Butler, Pa., sheets and strip except Types 303, 309, 416, 420, 501 & 502 A10.

Carnegie, Pa., sheets and strip except Types 303, 416, 501 & 502, S18.

Cleveland, strip A7.

Dunkirk, N.Y., bars, wire A4.

Duquesne, Pa., bars U5.

Gary, Ind., sheets except Type 416 U5.

Harrison, N. J., strip C18.

McKeesport, Pa., bars, sheets except Type 416 U5.

McKeesport, Pa., bars & wire except Types 301, 309, 501 & 502; strip Types 410 & 430 only F2.

Middletown, O., sheets and strip except Types 303, 416, 420, 501 and 502 A10.

Midland, sheets & strip C18.

Munhall, Pa., bars U5.

Pittsburgh, sheets C18.

Sharon, Pa., strip, except Types 303, 309, 316, 416, 501 and 502 S3.

So. Chicago, Ill., bars & structurals U5.

Syracuse, N. Y., bars, wire & structurals C18.

Titusville, Pa., bars, U4.

Wallingford, Conn., strip, except 309, W2 quotes 0.25 cents higher.

Washington, Pa., bars, sheets & strip, except Type 309 sheets 56.00c and bars 44.75c, J3.

Washington, Pa., Types 301 through 347 sheets & strip as listed except 303 & 309; 316 sheets 61.50c, strip 63.00c, W4.

Watervliet, N. Y., structurals & bars A4.

Waukegan, bars & wire A7.

West Leechburg, Pa., strip, A4.

COAL CHEMICALS

Spot, cents per gallon, ovens
Pure benzol 30.00-35.00
Toluol, one deg...26.00-33.00
Industrial xylol ..25.00-33.50
Per ton bulk, ovens
Sulphate of ammonia..$32.-45
Cents per pound, ovens
Phenol, 40 (carlots, non-returnable drums) ..17.25
Do., less than carlots..18.00
Do., tank cars 15.50

FLUORSPAR

Metallurgical grade, f.o.b. shipping point, in Ill., Ky., net tons, carloads, effective CaF_2 content, 70% or more, $41; less than 60%, $38.

Imported, net ton, duty paid, metallurgical grade, $33-$35.

METAL POWDERS

(Per pound, f.o.b. shipping point in ton lots for minus 100 mesh, except as otherwise noted.)

	Cents
Sponge Iron	
98+% Fe, carlots	16.00
Swedish, c.i.f. New York, in bags	7.00-8.50
Electrolytic Iron:	
Annealed, 99.5% Fe	42.50
Unannealed, 99+% Fe	36.50
Unannealed, 99+% Fe(minus 325 mesh)	58.50
Powder Flakes	48.50
Carbonyl Iron:	
97.9-99.8%, size 5 to 10 microns	83.00-148.00
Aluminum:	
Carlots, freight allowed	29.50
Atomized, 500 lb drums, freight allowed	33.50
Brass, 10-ton lots	30.00-33.25
Copper:	
Electrolytic	37.50
Reduced	33.75-37.00
Lead	25.50
Manganese:	
Minus 100-mesh	57.00
Minus 35 mesh	52.00
Minus 200 mesh	62.00
Nickel unannealed	83.00
Nickel-Silver, 10-ton lots	44.00
Silicon	38.50
Solder (plus cost of metal)	8.50
Stainless Steel, 302	$1.25
Tin	$1.62
Zinc, 10-ton lots	23.00-30.50
Tungsten:	Dollars
99%, minus 80 to 200 mesh, freight allowed:	
over 1000 lb	2.90
1000 lb	2.95
Less than 1000 lb	3.00
98.8% minus 65 mesh, freight allowed:	
1000 lb and over	4.15
less than 1000 lb	4.25
Molybdenum:	
99%, minus 80 to 200 mesh	
over 500 lb	2.85
200 to 500 lb	3.10
less than 200 lb	3.25
Chromium, electrolytic 99% Cr min.	3.50

METALLURGICAL COKE

Price per net ton

BEEHIVE OVENS

Connellsvil.fur. ..$14.50-15.00
Connellsvil.fdry. ..17.00-18.00
New River, foundry ...19.50
Wise county, foundry..15.95
Wise county, furnace..15.20

OVEN FOUNDRY COKE

Kearney, N. J., ovens $22.75
Everett, Mass., ovens New England, del...24.80
Chicago, ovens 21.00
Chicago, del. 22.45
Detroit, del. 24.91
Terre Haute, ovens....22.50
Milwaukee, ovens 23.75
Indianapolis, ovens 22.75
Chicago, del. 26.62
Cincinnati, del. 25.67
Detroit, del. 26.65
Ironton, O., ovens ...21.50
Cincinnati, del. 24.06
Painesville, O., ovens..24.00
Buffalo, del. 26.12
Cleveland, del. 25.72
Erie, Pa., ovens 23.50
Birmingham, ovens 20.30
Birmingham, del. 21.69
Philadelphia, ovens 22.70
Neville Island, Pa., ovens 23.00
Swedeland, Pa., ovens 22.00
St. Louis, ovens 24.25
St. Louis, del. 25.38
Portsmouth, O., ovens 21.50
Cincinnati, del. 24.06
Detroit, ovens 24.00
Detroit, del. *25.00
Buffalo, del. 27.04
Flint, del. 26.44
Pontiac, del. 25.28
Saginaw, del. 26.75

Includes representative switching charge of: *, $1.00; †, $1.45, one-track charge being $1.20, two tracks $1.40, and three or more tracks $1.50. ‡ Or within $4.15 freight zone from works.

WAREHOUSE STEEL PRODUCTS

(Prices, cents per pound, for delivery within switching limits, subject to extras)

	SHEETS			STRIP		BARS			Standard Structural Shapes	PLATES	
	H.R. 18 Ga., Heavier*	C.R.	Gal. 10 Ga.†	H.R.*	C.R.*	H.R. Rds.	C.F. Rds.	H.R. Alloy 4140§		Carbon	Floor
New York(city)	6.27	7.29	8.44	6.58	...	6.42	7.29	9.25	6.40	6.58	8.04
New York(c'try)	5.97	6.99	8.14	6.29	...	6.12	6.99	8.95	6.10	6.28	7.74
Boston (city) ..	6.40	7.20	8.49	6.35	...	6.25	7.04	9.25	6.40	6.98	7.88
Boston (c'try) .	6.20	7.00	8.29	6.15	...	6.05	6.84	9.05	6.30	6.78	7.68
Phila. (city) ..	7.15	7.05	8.25	6.35	...	6.30	7.11	8.90	6.15	6.30	7.40
Phila. (c'try) ..	6.90	6.80	8.00	6.10	...	6.05	6.86	8.65	5.90	6.06	7.15
Balt. (city) ...	5.80	7.04	8.27	6.24	...	6.24	7.09	...	6.34	6.00	7.64
Balt. (c'try) ..	5.60	6.84	8.07	6.04	...	6.04	6.89	...	6.14	5.80	7.44
Norfolk, Va. ..	6.50	...	...	6.70	...	6.55	7.70	...	6.60	6.50	8.00
Richmond, Va..	5.90	...	8.10	6.10	...	6.10	6.90	...	6.30	6.05	7.80
Wash. (w'hse) .	6.02	7.26	8.49	6.46	...	6.46	7.26	...	6.56	6.22	7.86
Buffalo (del.)..	5.80	6.60	8.29	6.06	...	5.80	6.65	10.65††[3]	6.00	6.25	7.55
Buffalo (w'hse)	5.60	6.40	8.09	5.86	...	5.60	6.45	10.45††[3]	5.80	6.05	7.35
Pitts. (w'hse) .	5.60	6.40*	7.75	5.65-5.95	6.90	5.55	6.40	10.10†††	5.70	5.75	7.00
Detroit (w'hse)	5.45-5.78	6.53-6.80	7.99	5.94-5.95	7.75	5.84	6.56	8.91	6.00	6.19-6.35	7.35
Cleveland (del.)	5.80	6.60	8.30	5.89	7.10	5.77	6.60-6.70	8.91	10.02	6.12	7.32
Cleve. (w'hse) .	5.60	6.40	8.10	5.69	6.90	5.57	6.40-6.50	8.71	5.82	5.92	7.12
Cincin. (city) ..	6.02	6.59	7.34	5.95	...	5.95	6.51	...	6.34	6.34	7.50
Chicago (city) .	5.80	6.60	7.95	5.75	...	5.75	6.50	10.30	5.90	6.00	7.20
Chicago (w'hse)	5.60	6.40	7.75	5.55	...	5.55	6.30	10.10	5.70	5.80	7.00
Milwaukee (city)	5.94	6.74	8.09	5.89	...	5.89	6.74	10.44	6.04	6.14	7.34
Milwau. (c'try)	5.74	6.54	7.89	5.69	...	5.69	6.54	10.24	5.84	5.94	7.14
St. Louis (del.)	5.68	6.48	7.28	5.63	...	5.63	6.28	10.08††[3]	5.78	5.93	7.13
St. L. (w'hse).	5.48	6.28	7.08	5.43	...	5.43	6.08	9.88††[3]	5.58	5.73	6.93
Kans. City(city)	6.40	7.20	8.40	6.35	...	6.35	7.20	...	6.50	6.40	7.80
KansCity(w'hse)	6.20	7.00	8.20	6.15	...	6.15	7.00	...	6.30	6.40	7.60
Omaha, Nebr...	6.13‡	...	8.33	6.13	...	6.18	6.98	...	6.18	6.38	7.83
Birm'hm(city) .	5.75	6.55	6.90[3]	5.70	...	5.70	7.53	...	5.85	6.10	8.25
Birm'hm(w'hse)	5.60	6.40	6.75[3]	5.55	...	5.55	7.53	...	5.70	5.95	8.23
Los Ang. (city)	6.55	8.10	9.05[3]	6.60	8.90	6.55	7.75	...	6.55	6.60	9.20
L. A. (w'hse)..	6.35	7.90	8.85[3]	6.40	8.70	6.35	7.55	...	6.35	6.40	8.70
San Francisco..	6.65	7.80[3]	8.90[3]	6.60	...	6.45	8.20	...	6.45	6.50	8.60
Seattle-Tacoma.	7.05	8.60[3]	9.20	7.30	...	6.75	9.10	11.15	6.65	6.75	8.80

* Prices do not include gage extras; † prices include gage and coating extras, except Birmingham (coating extra excluded) and Los Angeles (gage extra excluded); ‡ includes extra for 10 gage; § as rolled; †† as annealed. Base quantities, 2000 to 9999 lb except as noted: Cold-rolled strip, 2000 lb and over; cold-finished bars, 2000 lb and over; [3]—500 to 1499 lb; [4]—450 to 1499 lb; [5]—3500 lb and over; [6]—1000 to 1999 lb.

REFRACTORIES

(Prices per 1000 bricks, f.o.b. plant)

FIRE CLAY BRICK

Super Duty: St. Louis, Vandalia, Farber, Mexico, Mo., Olive Hill, Hayward, Ashland, Ky., Clearfield, Curwensville, Pa., Ottawa, Ill., $116.60. Hard-fired, St. Louis, Vandalia, Mo., Olive Hill, Ky., $156.20.

High-Heat Duty: Salina, Pa. $99.60; Woodbridge, N. J., St. Louis, Farber, Vandalia, Mexico, Mo., West Decatur, Orviston, Clearfield, Beach Creek, Curwensville, Lumber, Lockhaven, Pa., Olive Hill, Hitchins, Haldeman, Ashland, Ky., Troup, Athens, Tex., Stevens Pottery, Ga., Bessemer, Ala., Portsmouth, Oak Hill, O., Ottawa, Ill.,$94.60.

Intermediate-Heat Duty: St. Louis, Farber, Vandalia, Mo., West Decatur, Orviston, Beach Creek, Curwensville, Lumber, Lockhaven, St. Marys, Clearfield, Pa., Olive Hill, Hitchins, Haldeman, Ashland, Hayward, Ky., Athens, Troup, Tex., Stevens Pottery, Ga., Portsmouth, O., Ottawa, Ill., $88; Bessemer, Ala., $79.20.

Low-Heat Duty: Oak Hill, or Portsmouth, O., Clearfield, Orviston, Pa., $79.20; Parral, O., $78.50; St. Marys, Pa., $76; Ottawa, Ill., $70.

LADLE BRICK

Dry Press: Chester, New Cumberland, W. Va., Freeport, Merill Station, Clearfield, Pa., Irondale, Wellsville, O., $66.

Wire Cut: Chester, Wellsville, O., $64.

MALLEABLE BUNG BRICK

St. Louis, Vandalia, Farber, Mo., Olive Hill, Ky., $105.60; Beach Creek, Pa., $94.60; Ottawa, Ill., $90.

SILICA BRICK

Mt. Union, Claysburg, or Sproul, Pa., Portsmouth, O., Ensley, Ala., $94.60; Hays, Pa., $100.10; Joliet, Rockdale, Ill., E. Chicago, Ind., $104.50; Lehi, Utah, Los Angeles, $111.10.

Eastern Silica Coke Oven Shapes (net ton): Claysburg, Mt. Union, Sproul, Pa., Birmingham, $92.40.

Illinois Silica Coke Oven Shapes (net ton): Joliet or Rockdale, Ill., E. Chicago, Ind., Hays, Pa., $93.50.

BASIC BRICK

Per net ton, Baltimore or Chester, Pa. Burned chrome brick, $73-$78; chemical-bonded chrome brick, $77-$82; magnesite brick, $89-$104; chemical-bonded magnesite, $88-$93.

MAGNESITE

Per net ton, Chewelah, Wash. Domestic dead-burned, ⅜" grains; bulk, $36.30; single paper bags, $41.80.

DOLOMITE

Per net ton. Domestic, burned bulk: Bonne Terre, Mo., $12.15; Martin, Millersville, Narlo, Clay Center, Woodville, Gibsonburg, Bettsville, O., Billmeyer, Plymouth Meeting, Blue Bell, Williams, Pa., Millville, W. Va., $13.

ORES

LAKE SUPERIOR IRON ORE

Gross ton, 51½% (natural), lower lake ports. After adjustment for analysis, prices will be increased or decreased as the case may be for increases or decreases after Dec. 2, 1950 in applicable lake vessel rates, upper lake rail freights, dock handling charges and taxes thereon.

Old range bessemer	$8.70
Old range nonbessemer	8.55
Mesabi bessemer	8.45
Mesabi nonbessemer	8.30
High phosphorus	8.30

EASTERN LOCAL ORE

Cents per unit, del. E. Pa.

Foundry and basic 56.62% concentrates contract	17.00

FOREIGN ORE

Cents per unit, c.i.f. Atlantic ports

Swedish basic, 60 to 68%:	
Spot	17.00
Long-term contract	15.00
North African hematites	15.75
Brazilian iron ore, 68-69%	18.00

TUNGSTEN ORE

Net ton unit, duty paid

Foreign wolframite and scheelite, per net ton unit	$38-$39
Domestic scheelite, del.	nominal

MANGANESE ORE

Long term contracts, nominal; nearby, 48%, duty paid, 79.8c-81.8c per long ton unit, c.i.f. U. S. ports; prices on lower grades adjusted to manganese content and impurities.

CHROME ORE

Gross ton, f.o.b. cars, New York, Philadelphia, Baltimore, Charleston, S. C., plus ocean freight differential for delivery to Portland, Oreg., or Tacoma, Wash.

Indian and African	
48% 2.8:1	$32.50
48% 3:1	35.00-36.00
48% no ratio	26.00
South African Transvaal	
44% no ratio	$19.50
45% no ratio	20.00
48% no ratio	27.00
50% no ratio	28.00-28.50
Brazilian	
44% 2.5:1 lump	$32.00
Rhodesian	
45% no ratio	$20.00-21.00
48% no ratio	26.00
48% 3:1 lump	35.00-36.00
Domestic—rail nearest seller	
48% 3:1	$39.00

MOLYBDENUM

Sulphide concentrates per lb, molybdenum content, mines	$0.90

FERROALLOYS

MANGANESE ALLOYS

Spiegeleisen: (19-21% Mn, 1-3% Si). Carlot per gross ton, $70, Palmerton, Pa.; $71, Pittsburgh and Chicago; (16% to 19% Mn) $1 per ton lower.

Standard Ferromanganese: (Mn 78-82%, C 7% approx.) Carload, lump, bulk $185 per gross ton of alloy, c.l., packed, $197; gross ton lots, packed, $212; less gross ton lots, packed, $229; f.o.b. Alloy, W. Va., Niagara Falls, N. Y., Welland, Ont., or Ashtabula, O. Base price: $187, Johnstown, Pa.; $185, Sheridan, Pa.; $188, Etna, Pa.; $190, Chattanooga, Tenn. Shipment from Pacific Coast warehouses by one seller add $33 to above prices, f.o.b. Los Angeles, Oakland, Portland, Oreg. Shipment from Chicago warehouse, ton lots $227; less gross ton lots, $244 f.o.b. Chicago. Add or subtract $2.15 for each 1% or fraction thereof, of contained manganese over 82% and under 78%, respectively.

Low-Carbon Ferromanganese, Regular Grade: (Mn 85-90%.) Carload, lump, bulk, max. 0.07% C, 25.75c per lb of contained Mn, carload packed 26.5c, ton lot 27.6c, less ton 28.8c. Delivered. Deduct 0.5c for max. 0.15% C grade from above prices, 1c for max. 0.30% C, 1.5c for max. 0.50% C, and 4.5c for max. 75% C—max, 7% Si. **Special Grade:** (Mn 90% min., C 0.07% max., P 0.06% max.). Add 0.5c to above prices. Spot, add 0.25c.

Medium-Carbon Ferromanganese: (Mn 80-85%, C 1.5% max.). Carload, lump, bulk 19.15c per lb of contained Mn, carload packed 19.9c, ton lot 21.0c, less ton 22.2c. Delivered. Spot, add 0.25c.

Manganese Metal, 2" x D (Mn 96% min., Fe 2% max., Si 1% max., C 0.2% max.): Carload lump bulk, 29c per lb of metal; packed, 29.75c; ton lot 31.25c; less ton lot 33.25c. Delivered. Spot, add 2c.

Manganese, Electrolytic: 250 lb to 1999 lb, 33c; 2000 to 39,999 lb, 30c; 40,000 lb or more, 28c. Premium for hydrogen-removed metal 1.5c per pound, f.o.b. cars Knoxville, Tenn. Freight allowed to St. Louis or to any point east of Mississippi.

Silicomanganese: (Mn 65-68%). Contract, lump bulk, 1.50% C grade, 18-20% Si 9.90c per lb of alloy, carload packed, 10.65c, ton lot 11.55c, less ton 12.55c. Freight allowed. For 2% C grade, Si 15-17%, deduct 0.2c from above prices. For 3% C grade, Si 12-14.5%, deduct 0.5c from above prices. Spot, add 0.25c.

CHROMIUM ALLOYS

High-Carbon Ferrochrome: Contract, c.l., lump, bulk 21.75c per lb of contained Cr, c.l., packed 22.65c, ton lot 23.80c, less ton 25.20c. Delivered. Spot, add 0.25c.

"SM" High-Carbon Ferrochrome: (Cr 60-65%,

(Please turn to page 145)

Tin Prices Rise to All-Time High

Advance is attributed to heavy purchasing in the Far East by countries other than United States. NPA amends order to insure maximum use of tin scrap.

New York—Tin, mercury and silver prices rose sharply here last week, reflecting developments in foreign markets. Straits tin prices here advanced to an all-time high, following renewed strength at Singapore and London. The advance in the Far East is attributed to heavy buying by countries other than the United States. Mexico and Argentina, for instance, have been buying far in excess of their normal requirements.

National Production Authority has amended order M-8 to insure maximum use of tin scrap in the production of pig tin, alloys and chemicals. Smelters and refiners of secondary tin are permitted to use as much tin scrap and other secondary tin bearing materials that results from normal processing in the production of pig tin, alloys or chemicals.

As the stringency in nonferrous metals increases, the government is intensifying its efforts to conserve supplies for essential uses and to stabilize prices. Representatives of copper refiners, brass and bronze ingot makers and scrap metal concerns met in Washington last week with officials of the Economic Stabilization Agency. One of the current problems in the red metal industry which undoubtedly was discussed is the inability of refiners to obtain scrap due to high prices paid by ingot makers.

Record Shipments—Deliveries of zinc to domestic consumers increased to 72,276 tons in December from 69,202 tons in November, making the 1950 total 849,189 tons, an increase of 200,904 tons over the 1949 total and representing an all-time record high. Production increased to 80,007 tons from 79,226 tons in November, making the total for the year 910,375 tons against 870,113 tons in the preceding year. This was the third largest production, output having amounted to 971,873 tons in 1943 and 929,770 tons in 1942. Total deliveries on government account came to 128,256 tons last year compared with 91,526 tons in 1949.

Zinc purchases for the federal stockpile will be discontinued over the remainder of the fiscal year ending next June 30. This policy was decided on because of the tight supply situation in the metal.

Smelters' stocks of slab zinc dropped to only 8962 tons at the end of the year, the smallest recorded since November, 1925. Unfilled orders on their books total 74,795 tons compared with 60,779 tons at the end of November.

AT OUR DISPOSAL: German Pico, Chilean government official, says his country's available resources in copper, nitrate, lumber and other vital materials will be used to help the U.S. rearmament program. He went to Washington to confer on full production and further industrialization of Chile's important resources

Aluminum Project Progresses

Montreal, Que. — Agreement that will lead to a $500 million project for making aluminum in western Canada has been signed by the British Columbia government and Aluminum Co. of Canada Ltd. The company has received water power rights for a vast hydroelectric power project, representing the first step toward construction of a giant aluminum plant at or near Kitimat, B. C., about 400 miles north of Vancouver, Wash.

The plant would produce an estimated 1.1 billion pounds of aluminum a year, bringing the Canadian industry's total output to 2.5 billion pounds annually.

Certain features of the agreement require approval by the British Columbia legislature and for that reason E. T. Kenney, provincial lands minister, said "We are unable to say anything more than negotiations started in 1947 have received the final touches."

Silver Prices Rise Sharply

New York—Handy & Harman advanced its selling price on silver 10.16 cents an ounce to the basis of 90.16c an ounce. This is the first price increase since Oct. 24, 1950, when the price was raised 2.25 cents an ounce to 80.00c. Handy & Harman said, in announcing the increase:

"Because of the lack of any transactions in the silver market on Jan. 5, the orders carried over plus today's (Monday) demand were greater than the amount of foreign silver available. Accordingly it became necessary to purchase newly mined domestic silver at the same price which the United States Treasury pays under existing law, namely 90.50 cents per ounce 1.000 fine, the equivalent of 90.41c for commercial bar silver 0.999 fine. On this basis our Jan. 8 published quotation is 90.16c, representing as usual the price of silver contained in ores and other unrefined silver bearing materials."

The Bank of Mexico, which previously had been a supplier, has withdrawn at least temporarily as a seller. Silver stocks held by the Bank, it is reported, are sufficient to take care of only the coinage this year of new Mexican five-peso silver coins.

Bronze Bearings Inc. Formed

Cranford, N. J.—Bronze Bearings Inc. has been organized as a sales affiliate of the S. & H. Bronze Bearings Inc., this city, producer of bronze bearings and nonferrous castings. The operating company was formed last August to acquire the property of the S. & H Bronze Bearings Corp. Sidney Hausman is president. Since acquisition of the property, the new company has added facilities to both its foundry and machine shop. The plant has capacity of 5000 pounds per 8-hour shift.

Aluminum Foundry Sold

Cincinnati — Aluminum Foundry Co., this city, has been purchased by Richard T. Stanton, formerly general manager of the concern. Mr. Stanton bought the business from Emil Albrecht, who operated the company for 20 years and who is retiring after 45 years in the foundry business. Mr. Stanton has filed application for a charter for the new company, which will be known as the Aluminum Foundry Co. Inc. He will be president.

Quicksilver Prices Soar

New York—Sellers of quicksilver here withdrew from the market last week, pending a clarification of the price picture. Based on foreign prices, the market here is around $182.50 duty paid, New York. Prices soared more than 20 per cent on Jan. 8 to a price range of $162.40 to $165.20 per flask in the United Kingdom. This compares with the previous price range of $134.40 to $135.80.

Major Italian producers of quicksilver raised their selling price for home consumption to 70,000 Lire per flask of 76 lb at the mines, equivalent to $96.42 a flask. This is an increase of 10,000 Lire, or $13.78, a flask over the former price. The Italian producers have been out of the market as sellers of the metal for export for several months. Supplies in Italy continue limited. Small stocks above ground, coupled with domestic and other large commitments for the metal, leave Italian producers still unable to re-enter the market for exports.

Principal producers in Spain advanced their selling price $30 to the basis of $160, f.o.b. Spanish ports.

NONFERROUS METALS

(Cents per pound, carlots, except as otherwise noted)

Primary Metals

Copper: Electrolytic 24.50c Conn. Valley; Lake 24.62½c, delivered.

Brass Ingots: 85-5-5-5 (No. 115) 29.00c; 80-10-10-0 (No. 215) 43.25c; 80-10-10-2 (No. 305) 39.00c; No. 1 yellow (No. 405) 25.50c.

Zinc: Prime western 17.50c; brass special 17.75c; intermediate 18.00c; East St. Louis; high grade 18.60c, delivered.

Lead: Common 16.80c; chemical 16.90c; corroding 16.90c, St. Louis.

Primary Aluminum: 99% plus, ingots 19.00c, pigs 18.00c. Base prices for 10,000 lb and over. Freight allowed on 500 lb or more but not in excess of rate applicable on 30,000 lb carriers.

Secondary Aluminum: Piston alloys 30.50-31.75c; No. 12 foundry alloy (No. 2 grade) 30.00-30.75c; steel deoxidizing grades, notch bars, granulated or shot: Grade 1, 32.25-33.50c; grade 2, 30.50-30.75c; grade 3, 29.50-29.75c; grade 4, 29.00-29.50c. Prices include freight at c.l. rate up to 75 cents per 100 lb.

Magnesium: Commercially pure (99.8%) standard ingots, 10,000 lb and over 24.50c, f.o.b. Freeport, Tex.

Tin: Grade A, spot, prompt, 173.00c; Jan. 172.00c; Feb. 170.00; Mar. 168.00.

Antimony: American 99-99.8% and over but not meeting specifications below 32.00c; 99.8% and over (arsenic 0.05% max.; other impurities 0.1% max.) 32.50c; f.o.b. Laredo, Tex., for bulk shipments. Foreign, 99%: Chinese 34.00c; English, 32.75c; Belgian, 32.75c, duty paid, New York.

Nickel: Electrolytic cathodes, 99.9%, base sizes at refinery, unpacked, 50.50c; 25-lb pigs, 53.15c; "XX" nickel shot, 54.15c; "F" nickel shot for ingots, for addition to cast iron, 51.00c. Prices include import duty.

Mercury: Open market, spot, small lots, New York, $182.50 nominal, per 76-lb flask.

Beryllium-Copper: 3.75-4.25% Be, $1.56 per lb of alloy, f.o.b., Reading, Pa.

Cadmium: "Regular" straight or flat forms, $2.55 del.; special or patented shapes $2.80.

Cobalt: 97.99%, $2.10 per lb for 500 lb (kegs); $2.12 per lb for 100 lb (case); $2.17 per lb under 100 lb.

Gold: U. S. Treasury, $35 per ounce.

Silver: Open market, New York 90.16c per oz.

Platinum: $90-$93 per ounce from refineries.

Paladium: $24 per troy ounce.

Iridium: $200 per troy ounce.

Titanium (sponge form): $5 per pound.

Rolled, Drawn, Extruded Products

COPPER AND BRASS

(Base prices, cents per pound, f.o.b. mill)

Sheet: Copper 39.93-41.68; yellow brass 36.86-38.28; commercial bronze, 95%, 39.91-41.61; 90%, 39.48-41.13; red brass, 85%, 38.54-40.14; 80%, 38.12-39.67; best quality, 39.15; nickel silver, 18%, 50.57-51.91; phosphor-bronze grade A, 5%, 58.49-60.20.

Rods: Copper, hot-rolled 35.78-37.53; cold-drawn 37.03-38.78; yellow brass free cutting, 31.26-32.63; commercial bronze, 95%, 39.60-41.30; 90%, 39.17-40.82; red brass 85%, 38.23-39.88; 80%, 37.81-39.36.

Seamless Tubing: Copper 39.97-41.72; yellow brass 39.87-41.29; commercial bronze, 90%, 42.14-43.79; red brass, 85%, 41.45-43.05; 80%, 42.58.

Wire: Yellow brass 37.15-38.57; commercial bronze, 95%, 40.20; 90%, 39.77-41.42; red brass, 85%, 38.83-40.43; 80%, 38.41-39.96; best quality brass, 39.44.

Copper Wire: Bare, soft, f.o.b. eastern mills, c.l. 28.67-29.42, l.c.l. 29.17-29.92, 100,000 lb lots 28.545-29.295; weatherproof, f.o.b. eastern mills, c.l. 29.00, L.c.l. 30.10, 100,000 lb lots 29.35; magnet, del., 15,000 lb or more 34.50, l.c.l. 36.35.

ALUMINUM

(30,000 lb base; freight allowed on 500 lb or more, but not in excess of rate applicable on 30,000 lb c.l. orders.)

Sheets and Circles: 2S and 3S mill finish c.l.

Thickness Range, Inches	Widths or Diameters, In., Incl.	Flat Sheet Base*	Coiled Sheet Base	Coiled Sheet Circle† Base
0.249-0.136	12-48	30.1	...	...
0.135-0.096	12-48	30.6	...	...
0.095-0.077	12-48	31.2	29.1	33.2
0.076-0.061	12-48	31.8	29.3	33.4
0.060-0.048	12-48	32.1	29.5	33.7
0.047-0.038	12-48	32.5	29.8	34.0
0.037-0.030	12-48	32.9	30.2	34.6
0.029-0.024	12-48	33.4	30.5	35.0
0.023-0.019	12-36	34.0	31.1	35.7
0.018-0.017	12-36	34.7	31.7	36.6
0.016-0.015	12-36	35.5	32.4	37.6
0.014	12-24	36.5	33.3	38.9
0.013-0.012	12-24	37.4	34.0	39.7
0.011	12-24	38.4	35.0	41.2
0.010-0.0095	12-24	39.4	36.1	42.7
0.009-0.0085	12-24	40.6	37.2	44.4
0.008-0.0075	12-24	41.9	38.4	46.1
0.007	12-18	43.3	39.7	48.2
0.006	12-18	44.8	41.0	52.8

* Lengths 72 to 180 inches. † Maximum diameter, 26 inches.

Screw Machine Stock: 5000 lb and over.

Diam. (in.) or distance across flats	—Round— R317-T4, 17S-T4	R317-T4	——Hexagonal—— 17S-T4
0.125	52.0	....	....
0.156-0.188	44.0	....	....
0.219-0.313	41.5	....	....
0.375	40.0	46.0	48.0
0.406	40.0	....	....
0.438	40.0	46.0	48.0
0.469	40.0	....	....
0.500	40.0	46.0	48.0
0.531	40.0	....	....
0.563	40.0	....	45.0
0.594	40.0	....	....
0.625	40.0	43.5	45.0
0.688	40.0	....	45.0
0.750-1.000	39.0	41.0	42.5
1.063	39.0	....	41.0
1.125-1.500	37.5	39.5	41.0
1.563	37.0	....	....
1.625	36.5	....	39.5
1.688-2.000	36.5	....	....

LEAD

(Prices to jobbers, f.o.b. Buffalo, Cleveland, Pittsburgh) Sheets: Full rolls, 140 sq ft or more $22.00 per cwt; add 50c cwt 10 sq ft to 140 sq. ft. Pipe: Full coils $22.00 per cwt. Traps and bends: List prices plus 60%.

ZINC

Sheets, 24.50c, f.o.b. mill 36,000 lb and over. Ribbon zinc in coils, 23.00c, f.o.b. mill, 36,000 lb and over. Plates, not over 12-in., 23.50-24.50c; over 12-in., 23.50-24.50c.

"A" NICKEL

(Base prices f.o.b. mill)

Sheets, cold-rolled, 71.50c. Strip, cold-rolled 77.50c. Rods and shapes, 67.50c. Plates, 69.50c. Seamless tubes, 100.50c.

MONEL

(Base prices, f.o.b. mill)

Sheets, cold-rolled 57.00c. Strip cold-rolled 60.00c. Rods and shapes, 55.00c. Plates, 56.00c. Seamless tubes, 90.00c. Shot and blocks, 50.00c.

MAGNESIUM

Extruded Rounds, 12 in. long, 1.31 in. in diameter less than 25 lb, 55.00-62.00c; 25 to 99 lb, 45.00-52.00c; 100 lb to 5000 lb, 41.00c.

TITANIUM

(Prices per lb, 10,000 lb and over, f.o.b. mill) Sheets, $15; sheared mill plate, $12; strip, $15; wire, $10; forgings, $6; hot-rolled and forged bars, $6.

Plating Materials

Chromic Acid: 99.9% flake, f.o.b. Philadelphia, carloads, 27.00c; 5 tons and over 27.50c; 1 to 5 tons, 28.00c; less than 1 ton 28.50c.

Copper Anodes: Base 2000 to 5000 lb; f.o.b. shipping point, freight allowed; Flat untrimmed 37.69c; oval 37.19c; cast 37.375c.

Copper Cyanide: 70-71% Cu, 100-lb drums, 1000 lb 61.9c, under 1000 lb 63.9c, f.o.b. Niagara Falls, N. Y.

Sodium Cyanide: 96-98%, ½-oz ball, in 200 lb drums, 1 to 900 lb, 19.00c; 1000 to 19,900 lb, 18.00c, f.o.b. Niagara Falls, N. Y. Packaged in 100 lb drums add ½-cent.

Copper Carbonate: 54-56% metallic Cu; 50 lb bags, up to 200 lb, 29.25c; over 200 lb 28.25c, f.o.b. Cleveland.

Nickel Anodes: Rolled oval, carbonized, carloads, 70.00c; 10,000 to 30,000 lb, 68.00c; 3000 to 10,000 lb, 71.00c, 500 to 3000 lb, 72.00c; 100 to 500 lb, 74.00c; under 100 lb, 77.00c; f.o.b. Cleveland.

Nickel Chloride: 100-lb kegs, 35.00c; 400-lb bbl, 33.00c up to 10,000 lb, 32.50c; over 10,000 lb, f.o.b. Cleveland, freight allowed on barrels, or 4 or more kegs.

Tin Anodes: Bar, 1000 lb and over, nom.; 500 to 999 lb, nom.; 200 to 499 lb, nom.; less than 200 lb, nom.; ball, 1000 lb and over, nom.; 500 to 999 lb, nom.; 200 to 499 lb, nom.; less than 200 lb, nom.; f.o.b. Sewaren, N. J.

Sodium Stannate: 25 lb cans only, less than 100 lb, to consumers nom.; 100 or 300 lb drums only, 100 to 500 lb, nom.; 600 to 1900 lb, nom.; 2000 to 9900 lb, nom.; f.o.b. Sewaren, N. J. Freight not exceeding St. Louis rate allowed.

Zinc Cyanide: 100 lb drums, less than 10 drums 47.7c, 10 or more drums 45.7c, f.o.b. Niagara Falls, N. Y.

Stannous Sulphate: 100 lb kegs or 400 lb bbl, less than 2000 lb nom.; more than 2000 lb, nom., f.o.b. Carteret, N. J.

Stannous Chrolide (Anhydrous): In 400 lb bbl, nom.; 100 lb kegs nom., f.o.b. Carteret, N. J.

Scrap Metals

BRASS MILL ALLOWANCES

Prices in cents per pound for less than 15,000 lb, f.o.b. shipping point.

	Clean Heavy	Rod Ends	Clean Turnings
Copper	23.00	23.00	22.25
Yellow Brass	20.125	19.875	18.75
Commercial Bronze			
95%	21.875	21.625	21.125
90%	21.75	21.50	21.00
Red brass			
85%	21.50	21.25	20.75
80%	21.375	21.125	20.625
Munts metal	19.00	18.75	18.25
Nickel, silver, 10%	22.25	22.00	11.125
Phos. bronze, A	24.00	23.75	22.75

BRASS INGOT MAKERS' BUYING PRICES

(Cents per pound delivered eastern refineries, carload lots)

No. 1 copper 21.50*; No. 2 copper 20.00*; light copper 19.00*; composition red brass 22.00-22.50; radiators 17.25-17.50; heavy yellow brass 17.00.

* Nominal.

REFINERS' BUYING PRICES

(Cents per pound, delivered refinery, carload lots)

No. 1 copper 21.50*; No. 2 copper 20.00*; light copper 19.00*; refinery brass (60% copper) per dry copper content 19.50.

* Nominal.

DEALERS' BUYING PRICES

(Cents per pound, New York, in ton lots)

Copper and brass: Heavy copper and wire, No. 1 20.00; No. 2 18.50; light copper 17.25; No. 1 composition red brass 17.00-17.50; No. 1 composition turnings 16.50-17.00; mixed brass turnings 12.00-12.50; new brass clippings 17.50-18.00; No. 1 brass rod turnings 16.00-16.50; light brass 11.00; clean heavy yellow brass 14.50-15.00; new brass rod ends 16.50-17.00; auto radiators 14.50-1500; cocks and faucets, 15.50-16.00; brass pipe 17.00-17.50.

Lead: Heavy 14.50-14.75; battery plates 8.75-9.00; linotype and stereotype 14.50-14.75; electrotype 12.75-13.00; mixed babbitt 12.25-12.50.

Zinc: Old zinc 11.00-11.25; new die cast scrap 10.75-11.00; old die cast scrap 8.00-8.25.

Tin: No. 1 pewter 63.00-65.00; block tin pipe 90.00; No. 1 babbitt 58.00-60.00.

Aluminum: Clippings 2S 19.00-19.50; old sheets 15.50-16.00; crankcase 15.50-16.00; borings and turnings 12.00-12.50.

DAILY PRICE RECORD

1950	Copper	Lead	Zinc	Tin	Aluminum	Antimony	Nickel	Silver
Jan. 11	24.50	16.80	17.50	173.00	19.00	32.00	50.50	90.16
Jan. 10	24.50	16.80	17.50	171.00	19.00	32.00	50.50	90.16
Jan. 9	24.50	16.80	17.50	163.00	19.00	32.00	50.50	90.16
Jan. 8	24.50	16.80	17.50	159.00	19.00	32.00	50.50	90.16
Jan. 5-6	24.50	16.80	17.50	156.00	19.00	32.00	50.50	Nom.
Jan. 4	24.50	16.80	17.50	157.00	19.00	32.00	50.50	80.00
Jan. 3	24.50	16.80	17.50	152.00	19.00	32.00	50.50	80.00
Jan. 2	24.50	16.80	17.50	150.00	19.00	32.00	50.50	80.00
Dec. Avg.	24.50	16.80	17.50	144.74	19.00	32.00	49.40	80.00
Dec. 29-30	24.50	16.80	17.50	150.00	19.00	32.00	50.50	80.00
Dec. 28	24.50	16.80	17.50	151.00	19.00	32.00	50.50	80.00
Dec. 22-27	24.50	16.80	17.50	150.00	19.00	32.00	50.50	80.00
Dec. 20	24.50	16.80	17.50	150.00	19.00	32.00	50.50	80.00

NOTE: Copper; Electrolytic, del. Conn. Valley; Lead, common grade, del. St. Louis; Zinc, prime western, E. St. Louis; Tin, Straits ,del. New York; Aluminum primary ingots, 99%, del.; Antimony, bulk, f.o.b. Laredo, Tex.; Nickel, electrolytic cathodes, 99.9%, base sizes at refinery unpacked; Silver, open market, New York. Prices, cents per pound; except silver, cents per ounce.

IRON AND STEEL SCRAP

Consumers prices, except as otherwise noted, including brokers' commissions, as reported to STEEL, Jan. 11, 1951; gross tons
Changes shown in italics.

STEELMAKING SCRAP COMPOSITE

Jan. 11	$45.50
Jan. 4	45.50
Dec. 1950	45.50
Jan. 1950	26.93
Jan. 1946	19.17

Based on No. 1 heavy melting grade at Pittsburgh, Chicago and eastern Pennsylvania.

PITTSBURGH

No. 1 Heavy Melt.	$46.50
No. 2 Heavy Melt.	44.50
No. 1 Busheling	46.50
No. 1 Bundles	46.50
No. 2 Bundles	43.50
Heavy Turnings	47.00-48.00
Machine Shop Turnings	38.50
Mixed Borings, Turnings	38.50
Short Shovel Turnings	40.50
Cast Iron Borings	39.50-40.50
Low Phos. Steel	56.00-57.00

Cast Iron Grades

No. 1 Cupola Cast	57.00-58.00
No. 1 Machinery Cast	67.00-68.00
Charging Box Cast	56.00-56.00
Heavy Breakable Cast	54.00-55.00

Railroad Scrap

No. 1 R.R. Heavy Melt.	46.50
Rails, Random Lengths	64.00-65.00
Rails, 2 ft and under	68.00-69.00
Rails, 18 in. and under	69.00-70.00
Railroad Specialties	64.00-65.00

CLEVELAND

(Delivered Consuming Plant)

No. 1 Heavy Melt. Steel	$45.50-46.00†
No. 2 Heavy Melt. Steel	43.50-44.00†
No. 1 Busheling	45.50-46.00†
No. 1 Bundles	45.50-46.00†
No. 2 Bundles	40.00-42.00
Machine Shop Turnings	37.50-38.00
Mixed Borings, Turnings	39.00-40.00
Short Shovel Turnings	39.00-40.00
Cast Iron Borings	39.50-40.00
Low Phos.	48.00-48.50

Cast Iron Grades

No. 1 Cupola	65.00-66.00
Charging Box Cast	53.00-54.00
Stove Plate	55.00-56.00
Heavy Breakable Cast	55.00-56.00
Unstripped Motor Blocks	44.00-45.00
Brake Shoes	50.00-51.00
Clean Auto Cast	65.00-66.00
Burnt Cast	46.00-47.00

Railroad Scrap

No. 1 R.R. Heavy Melt.	46.00-46.50
R.R. Malleable	72.00-73.00
Rails, 3 ft and under	70.00-71.00
Rails, 18 in. and under	71.00-72.00
Rails, Random Lengths	64.00-65.00
Cast Steel	58.00-59.00
Railroad Specialties	60.00-61.00
Uncut Tires	60.00-61.00
Angles, Splice Bars	65.00-66.00

† Plus applicable springboards

VALLEY

No. 1 Heavy Melt. Steel	$46.00-46.50†
No. 2 Heavy Melt. Steel	44.00-44.50†
No. 1 Bundles	46.00-46.50†
Facty. Prod. Bundles	46.00-46.50†
No. 2 Bundles	40.50-42.50
Machine Shop Turnings	38.00-38.50
Short Shovel Turnings	40.00-40.50
Cast Iron Borings	40.00-40.50
Low Phos.	48.50-49.00

† Plus applicable springboards

Railroad Scrap

No. 1 R.R. Heavy Melt.	46.00-46.50

PHILADELPHIA

No. 1 Heavy Melt. Steel	$45.00
No. 2 Heavy Melt. Steel	43.00
No. 1 Busheling	43.00
No. 1 Bundles	45.00
No. 2 Bundles	42.00
Short Shovel Turnings	39.00
Machine Shop Turnings	37.00
Mixed Borings, Turnings	37.00
Low Phos. Punchings and Plate, elec. fur. grade	51.00
Low Phos. Plate, 5 ft. & Under	51.00
Elec. Furnace Bundles	48.00-49.00
Heavy Turnings	45.00
No. 1 Chemical Borings	45.00
Knuckles and couplers	56.00-58.00
Steel car wheels	56.00-58.00

Cast Iron Grades

No. 1 Cupola Cast	54.00-55.00
No. 1 Machinery Cast	58.00-60.00
No. 1 Yard Cast	*53.00*
Charging Box Cast	54.00-55.00
Heavy Breakable Cast	54.00-55.00
No. 1 Wheels	70.00*
Malleable	70.00-72.00

* Nominal

CINCINNATI

No. 1 Heavy Melt. Steel	$46.00
No. 2 Heavy Melt. Steel	44.00
No. 1 Busheling	46.00
No. 1 Bundles	46.00
No. 1 Black Bundles	46.00
Machine Shop Turnings	33.00
Short Shovel Turnings	34.00
Mixed Borings, Turnings	33.00
Cast Iron Borings	34.00

Cast Iron Grades

No. 1 Cupola Cast	70.00
Charging Box Cast	60.00
Stove Plate	55.00
Heavy Breakable Cast	56.00
Unstripped Motor Blocks	42.00
Brake Shoes	37.00
Clean Auto Cast	70.00
Drop Broken Cast	72.50
Low Phos., 18 in. and under	62.00

Railroad Scrap

No. 1 R.R. Heavy Melt.	46.00
R.R. Malleable	64.00
Rails, Rerolling	65.00
Rails, Random Lengths	65.00
Rails, 18 in. and under	72.50

DETROIT

(Brokers' buying prices, f.o.b. shipping point)

No. 2 Heavy Melt. Steel	$38.25-39.00
No. 1 Bundles	*40.25-45.00**
No. 2 Bundles	37.25-37.50
No. 1 Busheling	40.25-45.00
Machine Shop Turnings	32.25-33.00
Forge Flashings	40.25-45.00
Short Shovel Turnings	34.25-35.00
Cast Iron Borings	34.00-35.00
Punchings & Plate Scrap	42.75-46.00

Cast Iron Grades

No. 1 Cupola Cast	59.00-60.00
Heavy Breakable Cast	48.00-50.00
Clean Auto Cast	62.00-64.00

* Top of Jan. 8 price range ($50) represented a maximum delivered price.

BUFFALO

No. 1 Heavy Melt. Steel	$44.50-45.25
No. 2 Heavy Melt. Steel	42.50-43.25
No. 1 Busheling	42.50-43.25
No. 1 Bundles	43.50-44.25
No. 2 Bundles	41.50-42.25
Machine Shop Turnings	36.50-37.25
Mixed Borings, Turnings	36.50-37.25
Cast Iron Borings	36.50-37.25
Short Shovelings	38.50-39.25
Low Phos.	48.25-49.00

Cast Iron Grades

No. 1 Cupola	54.00-55.00
No. 1 Machinery	59.00-60.00
Malleable	nominal

Railroad Scrap

Rails, 2 ft and under	60.00-61.00
Rails, random size	55.00-56.00
Railroad Specialties	55.00-56.00

NEW YORK

(Brokers' buying prices f.o.b. shipping point)

No. 1 Heavy Melt. Steel	$39.00
No. 2 Heavy Melt. Steel	37.00
No. 1 Busheling	38.00-39.00
No. 1 Bundles	39.00
No. 2 Bundles	36.00
Mixed Borings, Turnings	31.00
Machine Shop Turnings	31.00
Short Shovel Turnings	33.00
Punchings & Plate Scrap	41.50
Low Phos. Plate, 5 ft & under	41.50
Elec. Furnace Bundles	41.50

Cast Iron Grades

No. 1 Cupola Cast	47.00-48.00
No. 1 Machinery	49.00-50.00
Charging Box Cast	44.00-45.00
Heavy Breakable	44.00-45.00
Unstripped Motor Blocks	41.00-42.00

BOSTON

(F.o.b. shipping point)

No. 1 Heavy Melt. Steel	$35.67
No. 2 Heavy Melt. Steel	33.67
No. 1 Bundles	33.67
No. 1 Busheling	33.67
Machine Shop Turnings	27.67
Short Shovel Turnings	29.67
Mixed Borings, Turnings	29.67
Bar Crops and Plate	44.50-45.00
Punchings & Plate Scrap	44.50-45.00
Chemical Borings	33.00-34.00

Cast Iron Grades

No. 1 Cupola Cast	46.00-47.00
Mixed Cast	44.00-45.00
Heavy Breakable Cast	43.00-43.50
Stove Plate	42.00-43.00

CHICAGO

No. 1 Heavy Melt. Steel	$45.00
No. 2 Heavy Melt. Steel	43.00
No. 1 Bundles	45.00
No. 2 Bundles	42.00
Machine Shop Turnings	35.00-36.00
Mixed Borings, Turnings	35.00-36.00
Short Shovel Turnings	*36.00-37.00*
Cast Iron Borings	36.00-37.00
Low Phos.	52.00-54.00
Elec. Furnace Bundles	46.00-48.00
Heavy Turnings	41.00-42.00
Cut Structurals	50.00-51.00

Cast Iron Grades

No. 1 Cupola Cast	*61.00-63.00*
Clean Auto Cast	*64.00-65.00*
No. 1 Wheels	60.00-62.00
Stove Plate	49.00-50.00

Railroad Scrap

No. 1 R.R. Heavy Melt.	46.00-47.00*
Malleable	73.00-75.00
Rails, Rerolling	66.00-68.00*
Rails, Random Lengths	*58.00-59.00*
Rails, 2 ft. and under	*67.00-68.00*
Rails, 18 in. and under	*68.00-69.00*
Railroad Specialties	58.00-59.00
Angles, Splice Bars	59.00-60.00

* Brokers' buying price.

BIRMINGHAM

No. 1 Heavy Melt. Steel	*$41.42*
No. 2 Heavy Melt. Steel	41.50
No. 1 Busheling	43.50
No. 2 Bundles	40.50
Machine Shop Turnings	35.50
Mixed Borings, Turnings	35.50
Short Shovel Turnings	37.50
Cast Iron Borings	28.00
Bar Crops and Plate	46.00-47.00
Cut Structurals	46.00-47.00

Cast Iron Grades

No. 1 Cupola Cast	*55.00-56.00*
Stove Plate	*50.50-51.00*
No. 1 Wheels	nominal

Railroad Scrap

No. 1 R.R. Heavy Melt.	43.50
R.R. Malleable	nominal
Rails, Rerolling	60.00-61.00
Rails, 2 ft and under	65.00-66.00
Angles and Splice Bars	59.00-60.00

ST. LOUIS

No. 1 Heavy Melt. Steel	$40.00-47.00
No. 2 Heavy Melt. Steel	41.50-42.50
No. 1 Bundles	46.00-47.00
No. 2 Bundles	40.00-41.50
Machine Shop Turnings	33.00-34.00
Short Shovel Turnings	35.00-37.00

Cast Iron Grades

No. 1 Cupola Cast	58.00-60.00
Charging Box Cast	51.00-53.00
Heavy Breakable Cast	56.00-57.00
Brake Shoes	56.00-58.00
Clean Auto Cast	65.00-67.00
Burnt Cast	53.00-54.00

Railroad Scrap

R.R. Malleable	63.00-65.00
Rails, Rerolling	66.00-68.00
Rails, Random Lengths	59.00-61.00
Rails, 2 ft and under	65.00-67.00
Uncut Tires	57.00-58.00
Angles, Splice Bars	66.00-68.00
Railroad Specialties	60.00-62.00

SAN FRANCISCO

No. 1 Heavy Melt. Steel	$30.00
No. 2 Heavy Melt. Steel	28.00
No. 1 Bundles	30.00
No. 2 Bundles	28.00
No. 3 Bundles	25.00
Machine Shop Turnings	16.00
Low Phos. Electric	45.00

Cast Iron Grades

No. 1 Cupola Cast	43.00-45.00

Railroad Scrap

No. 1 R.R. Heavy Melt.	30.00
Rails, Random Lengths	30.00

SEATTLE

No. 1 Heavy Melt. Steel	$28.00
No. 2 Heavy Melt. Steel	28.00
No. 1 Busheling	25.50-28.00
Nos. 1 & 2 Bundles	25.50-28.00
No. 3 Bundles	22.00
Machine Shop Turnings	20.00
Mixed Borings, Turnings	20.00
Punchings & Plate Scrap	40.00-44.00
Cut Structurals	40.00-44.00

Cast Iron Grades

No. 1 Cupola Cast	42.00-44.00
Heavy Breakable Cast	38.00-40.00
Stove Plate	36.00-38.00
Unstripped Motor Blocks	33.00-35.00
Malleable	33.00-35.00
Brake Shoes	35.00
Clean Auto Cast	40.00
No. 1 Wheels	40.00

Railroad Scrap

No. 1 R.R. Heavy Melt.	29.00
Railroad Malleable	35.00
Rails, Random Lengths	29.00-30.00
Angles and Splice Bars	29.00-30.00

LOS ANGELES

(Delivered prices)

No. 1 Heavy Melt. Steel	$30.00
No. 2 Heavy Melt. Steel	28.00
No. 1 Bundles	30.00
No. 2 Bundles	28.00
No. 3 Bundles	25.00
Machine Shop Turnings	16.00
Punchings & Plate Scrap	40.00

Cast Iron Grades

No. 1 Cupola Cast	45.00-48.00

Railroad Scrap

No. 1 R.R. Heavy Melt.	nominal
Rails, Rerolling	48.00

HAMILTON, ONT.

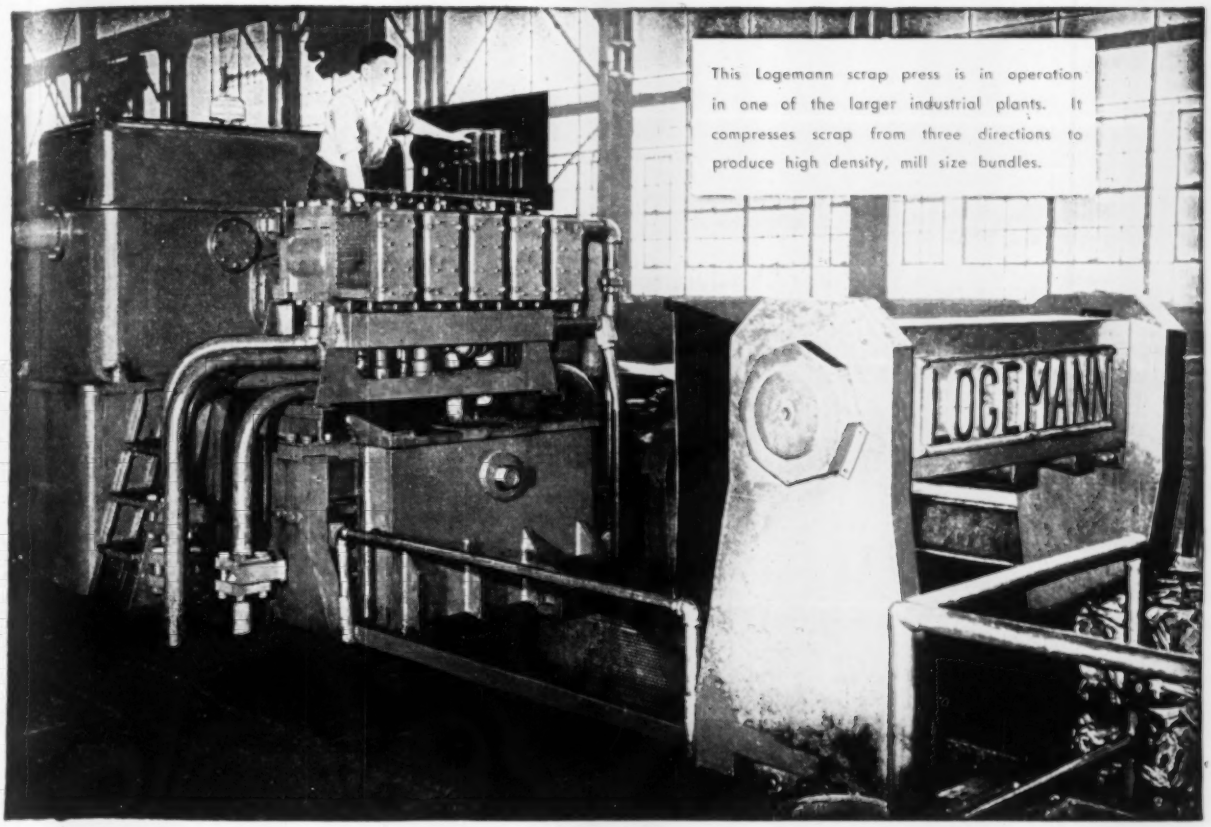
(Delivered prices)

Heavy Melt.	$36.00
No. 1 Bundles	30.00
Mechanical Bundles	28.00
Mixed Steel Scrap	28.00
Mixed Borings, Turnings	23.00
Rails, Remelting	30.00
Rails, Rerolling	34.00
Busheling	24.50
Bushelings new factory, prep'd	23.00
Bushelings new factory, unprep'd	23.00
Short Steel Turnings	23.00

Cast Iron Grades*

No. 1 Machinery Cast	50.00

* F.o.b. shipping point.



This Logemann scrap press is in operation in one of the larger industrial plants. It compresses scrap from three directions to produce high density, mill size bundles.

Self-contained.....
Triple Compression..
Automatically Controlled

LOGEMANN SCRAP PRESSES

handle high tonnages with minimum labor . . . at low cost!

LOGEMANN METAL BALERS

. . . are built in a large range of sizes to meet specific conditions. Let Logemann's engineering service help you arrive at the most efficient and economical way of handling your scrap.

The compact unit illustrated is completely self-contained with oil tank and pump located directly over the press . . . utilizing the advantages of short pipe lines. Automatic controls, mounted in front of pump, give the operator full visibility at all times. Controls operate rams successively within a single rigid box. There is no complex construction which means there is *no need for specially-trained maintenance crews.*

Both two-ram and three-ram models are available with automatic controls or for manual manipulation.

Logemann Bros. Co. have specialized in the production of scrap metal presses for sheet mills, stamping plants, scrap yards, and metal manufacturing plants of all types for nearly 75 years. Write for full information—please state the nature of your scrap and tonnage.

LOGEMANN BROTHERS COMPANY
3164 W. Burleigh Street • Milwaukee 10, Wisconsin

IRON AND STEEL SCRAP

Consumers prices, except as otherwise noted, including brokers' commissions, as reported to STEEL, Jan. 11, 1951; gross tons
Changes shown in italics.

STEELMAKING SCRAP COMPOSITE

Jan. 11	$45.50
Jan. 4	45.50
Dec. 1950	45.50
Jan. 1950	26.93
Jan. 1946	19.17

Based on No. 1 heavy melting grade at Pittsburgh, Chicago and eastern Pennsylvania.

PITTSBURGH

No. 1 Heavy Melt.	$46.50
No. 2 Heavy Melt.	44.50
No. 1 Busheling	46.50
No. 1 Bundles	46.50
No. 2 Bundles	43.50
Heavy Turnings	47.00-48.00
Machine Shop Turnings	38.50
Mixed Borings, Turnings	38.50
Short Shovel Turnings	40.50
Cast Iron Borings	39.50-40.50
Low Phos. Steel	56.00-57.00

Cast Iron Grades

No. 1 Cupola Cast	57.00-58.00
No. 1 Machinery Cast	67.00-68.00
Charging Box Cast	56.00-56.00
Heavy Breakable Cast	54.00-55.00

Railroad Scrap

No. 1 R.R. Heavy Melt.	46.50
Rails, Random Lengths	64.00-65.00
Rails, 2 ft and under	68.00-69.00
Rails, 18 in. and under	69.00-70.00
Railroad Specialties	64.00-65.00

CLEVELAND

(Delivered Consuming Plants)

No. 1 Heavy Melt. Steel	$45.50-46.00†
No. 2 Heavy Melt. Steel	43.50-44.00†
No. 1 Busheling	45.50-46.00†
No. 1 Bundles	45.50-46.00†
No. 2 Bundles	40.00-42.00
Machine Shop Turnings	37.50-38.00
Mixed Borings, Turnings	39.00-40.00
Short Shovel Turnings	39.00-40.00
Cast Iron Borings	39.50-40.00
Low Phos.	48.00-48.50

Cast Iron Grades

No. 1 Cupola	65.00-66.00
Charging Box Cast	53.00-54.00
Stove Plate	55.00-56.00
Heavy Breakable Cast	55.00-56.00
Unstripped Motor Blocks	44.00-45.00
Brake Shoes	50.00-51.00
Clean Auto Cast	65.00-66.00
Burnt Cast	46.00-47.00

Railroad Scrap

No. 1 R.R. Heavy Melt.	46.00-46.50
R.R. Malleable	72.00-73.00
Rails, 3 ft and under	70.00-71.00
Rails, 18 in. and under	71.00-72.00
Rails, Random Lengths	64.00-65.00
Cast Steel	58.00-59.00
Railroad Specialties	60.00-61.00
Uncut Tires	60.00-61.00
Angles, Splice Bars	65.00-66.00

† Plus applicable springboards

VALLEY

No. 1 Heavy Melt. Steel	$46.00-46.50†
No. 2 Heavy Melt. Steel	44.00-44.50†
No. 1 Bundles	46.00-46.50†
Facty. Prod. Bundles	46.00-46.50†
No. 2 Bundles	40.50-42.50
Machine Shop Turnings	38.00-38.50
Short Shovel Turnings	40.00-40.50
Cast Iron Borings	40.00-40.50
Low Phos.	48.50-49.00

† Plus applicable springboards

Railroad Scrap

No. 1 R.R. Heavy Melt.	46.00-46.50

PHILADELPHIA

No. 1 Heavy Melt. Steel	$45.00
No. 2 Heavy Melt. Steel	43.00
No. 1 Busheling	43.00
No. 1 Bundles	45.00
No. 2 Bundles	42.00
Short Shovel Turnings	39.00
Machine Shop Turnings	37.00
Mixed Borings, Turnings	37.00
Low Phos. Punchings and Plate, elec. fur. grade	51.00
Low Phos. Plate, 5 ft. & Under	51.00
Elec. Furnace Bundles	48.00-49.00
Heavy Turnings	45.00
No. 1 Chemical Borings	45.00
Knuckles and couplers	56.00-58.00
Steel car wheels	56.00-58.00

Cast Iron Grades

No. 1 Cupola Cast	54.00-55.00
No. 1 Machinery Cast	58.00-60.00
No. 1 Yard Cast	*53.00*
Charging Box Cast	54.00-55.00
Heavy Breakable Cast	54.00-55.00
No. 1 Wheels	70.00*
Malleable	70.00-72.00

* Nominal

CINCINNATI

No. 1 Heavy Melt. Steel	$46.00
No. 2 Heavy Melt. Steel	44.00
No. 1 Busheling	46.00
No. 1 Bundles	46.00
No. 1 Black Bundles	46.00
Machine Shop Turnings	33.00
Short Shovel Turnings	34.00
Mixed Borings, Turnings	33.00
Cast Iron Borings	34.00

Cast Iron Grades

No. 1 Cupola Cast	70.00
Charging Box Cast	60.00
Stove Plate	55.00
Heavy Breakable Cast	56.00
Unstripped Motor Blocks	42.00
Brake Shoes	37.00
Clean Auto Cast	70.00
Drop Broken Cast	72.50
Low Phos., 18 in. and under	62.00

Railroad Scrap

No. 1 R.R. Heavy Melt.	46.00
R.R. Malleable	64.00
Rails, Rerolling	65.00
Rails, Random Lengths	65.00
Rails, 18 in. and under	72.50

DETROIT

(Brokers' buying prices, f.o.b. shipping point)

No. 2 Heavy Melt. Steel	$38.25-39.00
No. 1 Bundles	*40.25-45.00**
No. 2 Bundles	37.25-37.50
No. 1 Busheling	40.25-45.00
Machine Shop Turnings	32.25-33.00
Forge Flashings	40.25-45.00
Short Shovel Turnings	34.25-35.00
Cast Iron Borings	34.00-35.00
Punchings & Plate Scrap	42.75-46.00

Cast Iron Grades

No. 1 Cupola Cast	59.00-60.00
Heavy Breakable Cast	48.00-50.00
Clean Auto Cast	62.00-64.00

* Top of Jan. 8 price range ($50) represented a maximum delivered price.

BUFFALO

No. 1 Heavy Melt. Steel	$44.50-45.25
No. 2 Heavy Melt. Steel	42.50-43.25
No. 1 Busheling	42.50-43.25
No. 1 Bundles	43.50-44.25
No. 2 Bundles	41.50-42.25
Machine Shop Turnings	36.50-37.25
Mixed Borings, Turnings	36.50-37.25
Cast Iron Borings	36.50-37.25
Short Shovelings	38.50-39.25
Low Phos.	48.25-49.00

Cast Iron Grades

No. 1 Cupola	54.00-55.00
No. 1 Machinery	59.00-60.00
Malleable	nominal

Railroad Scrap

Rails, 2 ft and under	60.00-61.00
Rails, random size	55.00-56.00
Railroad Specialties	55.00-56.00

NEW YORK

(Brokers' buying prices f.o.b. shipping point)

No. 1 Heavy Melt. Steel	$39.00
No. 2 Heavy Melt. Steel	37.00
No. 1 Busheling	38.00-39.00
No. 1 Bundles	39.00
No. 2 Bundles	36.00
Mixed Borings, Turnings	31.00
Machine Shop Turnings	31.00
Short Shovel Turnings	33.00
Punchings & Plate Scrap	41.50
Low Phos. Plate, 5 ft & under	41.50
Elec. Furnace Bundles	41.50

Cast Iron Grades

No. 1 Cupola Cast	47.00-48.00
No. 1 Machinery	49.00-50.00
Charging Box Cast	44.00-45.00
Heavy Breakable	44.00-45.00
Unstripped Motor Blocks	41.00-42.00

BOSTON

(F.o.b. shipping point)

No. 1 Heavy Melt. Steel	$35.67
No. 2 Heavy Melt. Steel	33.67
No. 1 Bundles	35.67
No. 1 Busheling	35.67
Machine Shop Turnings	27.67
Short Shovel Turnings	29.67
Mixed Borings, Turnings	29.67
Bar Crops and Plate	44.50-45.00
Punchings & Plate Scrap	44.50-45.00
Chemical Borings	33.00-34.00

Cast Iron Grades

No. 1 Cupola Cast	46.00-47.00
Mixed Cast	44.00-45.00
Heavy Breakable Cast	43.00-43.50
Stove Plate	42.00-43.00

CHICAGO

No. 1 Heavy Melt. Steel	$45.00
No. 2 Heavy Melt. Steel	43.00
No. 1 Bundles	45.00
No. 2 Bundles	42.00
Machine Shop Turnings	35.00-36.00
Mixed Borings, Turnings	35.00-36.00
Short Shovel Turnings	*36.00-37.00*
Cast Iron Borings	36.00-37.00
Low Phos.	52.00-54.00
Elec. Furnace Bundles	46.00-48.00
Heavy Turnings	41.00-42.00
Cut Structurals	50.00-51.00

Cast Iron Grades

No. 1 Cupola Cast	*61.00-63.00*
Clean Auto Cast	*64.00-65.00*
No. 1 Wheels	60.00-62.00
Stove Plate	49.00-50.00

Railroad Scrap

No. 1 R.R. Heavy Melt.	46.00-47.00*
Malleable	73.00-75.00
Rails, Rerolling	66.00-68.00*
Rails, Random Lengths	*58.00-59.00*
Rails, 2 ft. and under	*67.00-68.00*
Rails, 18 in. and under	*68.00-69.00*
Railroad Specialties	58.00-59.00
Angles, Splice Bars	59.00-60.00

* Brokers' buying price.

BIRMINGHAM

No. 1 Heavy Melt. Steel	*$41.42*
No. 2 Heavy Melt. Steel	41.50
No. 1 Busheling	43.50
No. 2 Bundles	40.50
Machine Shop Turnings	35.50
Mixed Borings, Turnings	35.50
Short Shovel Turnings	37.50
Cast Iron Borings	28.00
Bar Crops and Plate	46.00-47.00
Cut Structurals	46.00-47.00

Cast Iron Grades

No. 1 Cupola Cast	*55.00-56.00*
Stove Plate	*50.50-51.00*
No. 1 Wheels	nominal

Railroad Scrap

No. 1 R.R. Heavy Melt.	43.50
R.R. Malleable	nominal
Rails, Rerolling	60.00-61.00
Rails, 2 ft and under	65.00-66.00
Angles and Splice Bars	58.00-60.00

ST. LOUIS

No. 1 Heavy Melt. Steel	$46.00-47.00
No. 2 Heavy Melt. Steel	41.50-42.50
No. 1 Bundles	46.00-47.00
No. 2 Bundles	40.00-41.50
Machine Shop Turnings	33.00-34.00
Short Shovel Turnings	35.00-37.00

Cast Iron Grades

No. 1 Cupola Cast	58.00-60.00
Charging Box Cast	51.00-53.00
Heavy Breakable Cast	56.00-57.00
Brake Shoes	56.00-58.00
Clean Auto Cast	65.00-67.00
Burnt Cast	53.00-54.00

Railroad Scrap

R.R. Malleable	63.00-65.00
Rails, Rerolling	66.00-68.00
Rails, Random Lengths	59.00-61.00
Rails, 2 ft and under	65.00-67.00
Uncut Tires	57.00-58.00
Angles, Splice Bars	66.00-68.00
Railroad Specialties	60.00-62.00

SAN FRANCISCO

No. 1 Heavy Melt. Steel	$30.00
No. 2 Heavy Melt. Steel	28.00
No. 1 Bundles	30.00
No. 2 Bundles	28.00
No. 3 Bundles	25.00
Machine Shop Turnings	16.00
Low Phos. Electric	45.00

Cast Iron Grades

No. 1 Cupola Cast	43.00-45.00

Railroad Scrap

No. 1 R.R. Heavy Melt.	30.00
Rails, Random Lengths	30.00

SEATTLE

No. 1 Heavy Melt. Steel	$28.00
No. 2 Heavy Melt. Steel	28.00
No. 1 Busheling	25.50-26.00
Nos. 1 & 2 Bundles	25.50-26.00
No. 3 Bundles	22.00
Machine Shop Turnings	20.00
Mixed Borings, Turnings	20.00
Punchings & Plate Scrap	40.00-44.00
Cut Structurals	40.00-44.00

Cast Iron Grades

No. 1 Cupola Cast	42.00-44.00
Heavy Breakable Cast	38.00-40.00
Stove Plate	36.00-38.00
Unstripped Motor Blocks	33.00-35.00
Malleable	38.00-85.00
Brake Shoes	35.00
Clean Auto Cast	40.00
No. 1 Wheels	40.00

Railroad Scrap

No. 1 R.R. Heavy Melt.	29.00
Railroad Malleable	35.00
Rails, Random Lengths	29.00-30.00
Angles and Splice Bars	29.00-30.00

LOS ANGELES

(Delivered prices)

No. 1 Heavy Melt. Steel	$30.00
No. 2 Heavy Melt. Steel	28.00
No. 1 Bundles	30.00
No. 2 Bundles	28.00
No. 3 Bundles	25.00
Machine Shop Turnings	16.00
Punchings & Plate Scrap	40.00

Cast Iron Grades

No. 1 Cupola Cast	45.00-48.00

Railroad Scrap

No. 1 R.R. Heavy Melt.	nominal
Rails, Rerolling	48.00

HAMILTON, ONT.

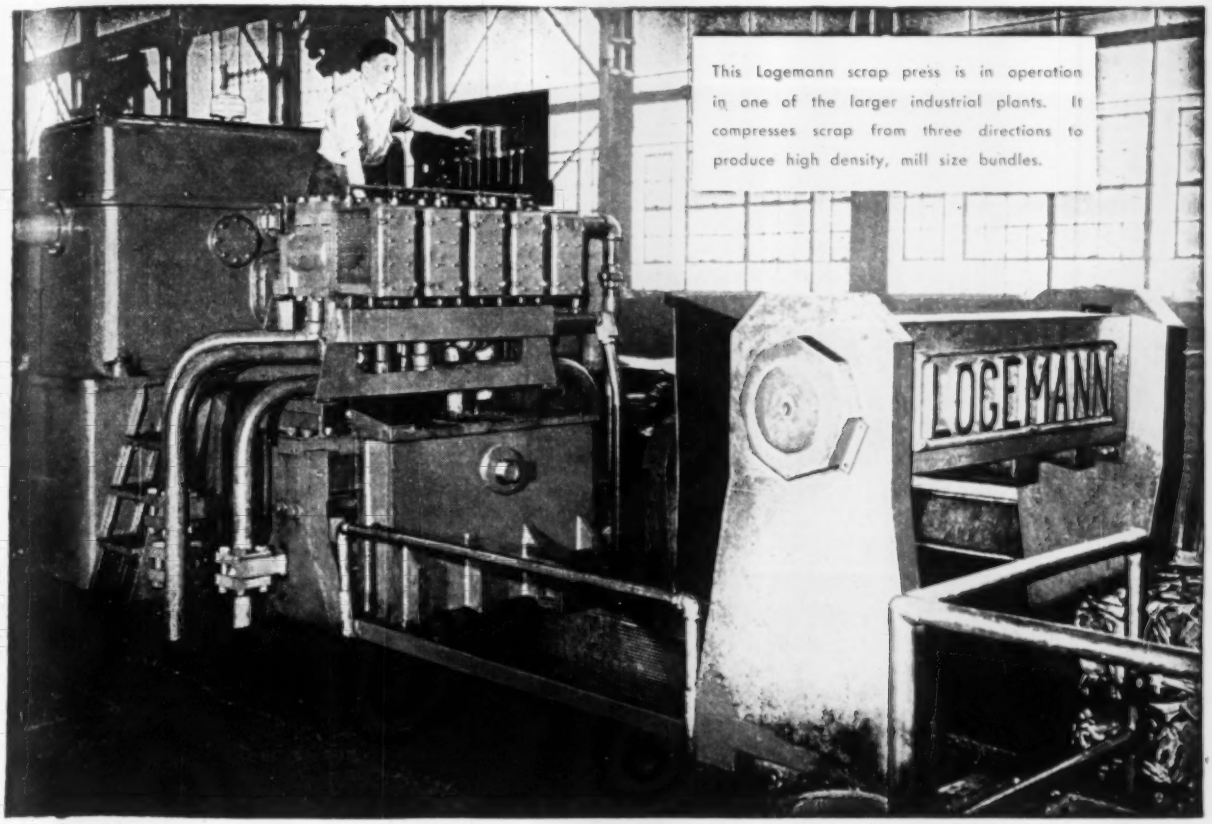
(Delivered prices)

Heavy Melt.	$36.00
No. 1 Bundles	30.00
Mechanical Bundles	28.00
Mixed Steel Scrap	28.00
Mixed Borings, Turnings	22.00
Rails, Remelting	30.00
Rails, Rerolling	32.00
Busheling	24.50
Bushelings new factory, prep'd	28.00
Bushelings new factory, unprep'd	23.00
Short Steel Turnings	22.00

Cast Iron Grades*

No. 1 Machinery Cast	50.00

* F.o.b. shipping point.



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Self-contained.....
Triple Compression..
Automatically Controlled

LOGEMANN SCRAP PRESSES

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Logemann Bros. Co. have specialized in the production of scrap metal presses for sheet mills, stamping plants, scrap yards, and metal manufacturing plants of all types for nearly 75 years. Write for full information—please state the nature of your scrap and tonnage.

LOGEMANN BROTHERS COMPANY
3164 W. Burleigh Street • Milwaukee 10, Wisconsin

Steel Bars . . .

Bar Prices, Page 125

New York—One leading seller of hot carbon bars has doubled its minimum quotas on DO-rated orders. As a result, he is in position to take such rated business as early as April and just before closing books for March was able to add a little extra tonnage for that month also. Previously this producer was sold up through most of June.

There is an increasing disposition among sellers to go beyond minimum quotas set up by Washington, as deliveries otherwise are becoming too extended to be of much help in various instances. Meanwhile, producers are now fully booked up for the current quarter as the lead time has now expired and are not booking beyond on non-rated tonnage. There are a few exceptions where longer than 45 days is required to process the tonnage, but the overall quantity is small. Actually producers are moving as slowly as possible in committing themselves ahead for the reason it is generally believed there will have to be a reshuffling of ratings to something along the lines of CMP in World War II if defense work is to be handled efficiently. Some reports from Washington indicate it will be difficult to make any broad revision in the rating system before third quarter, but many producers still think it will come before then.

Philadelphia—Highly divergent requirements are maintaining hot carbon bar production at peak. Mills have closed their books for March on non-rated as well as rated business and are into the second quarter on the latter. By stepping up its acceptances of DO-rated orders beyond the minimum quotas specified by the government, one leading producer, which had been sold up through practically all of the second quarter on rated tonnage is now in position to accept DO-orders for delivery as early as April.

Pittsburgh—Substantial increase in hot-rolled bar demand for essential end uses is noted. This trend has prompted NPA to lift the maximum tonnage set aside by the mills for hot-rolled bars and small shapes from 5 to 10 per cent beginning with March shipments. Additional upward adjustments in maximum percentage set-aside for other products are expected, particularly for alloys and sheets. In addition to increased needs for military end uses, there is good prospect mill shipments will be augmented for indirect war programs.

Cleveland—Bar mill set-aside tonnage for DO orders will be increased to 10 per cent, it was reported in the market last week. It had been only 5 per cent since early in December. This means the squeeze on regular commercial account supplies is tightening noticeably with more defense business coming to the fore. More manufacturers are getting into defense work and this is bringing out a larger volume of rated orders.

Chicago—Some barmakers schedule their mills on a two-month rolling cycle. Thus, for the January-February period they will be producing against the yearend carryover clean-up. The picture for March-April cannot be fully appraised at this time. It is understood NPA is about to increase from 5 to 10 per cent the proportion of DO orders which barmakers must provide.

Seattle—Inquiry has tapered but rolling mills continue at peak capacity. Northwest Steel Rolling Mills, Inc., Seattle, resumed rolling Jan. 8 after repairs. Small jobs are numerous. Merchant bars are moving freely, mostly into inventory. Increased shipyard operations are expected.

Sheets, Strip . . .

Sheet and Strip Prices, Page 125 & 126

New York—DO-rated orders in sheets appear to be mostly for electronic equipment, although there are some tonnages for the Atomic Energy Commission. Although various mills are not holding too rigidly to the minimum tonnage they are compelled to accept on DO-rated orders, deliveries on such ratings are becoming more extended. In some grades of sheets sellers are booked up throughout most of second quarter and there is a general feeling some change in the rating system will be necessary.

Philadelphia—Less pressure is noted for enameling stock and this is regarded as significant of an easing in production of household appliances. However, specifications are still substantial. Hot and cold carbon sheets also reflect this situation to some degree, but demand is still far in excess of supply, and with rated orders steadily expanding there appears to be no letup in the overall picture whatsoever. Galvanized sheet requirements are taxing all facilities and specialties, such as electrical sheets and stainless, are in heavy demand for emergency work.

Cleveland—The heavily booked up position of sheetmakers precludes any material easing in supply conditions over coming weeks even though curtailments in civilian goods production should result in some easing of demand pressure on the mills. Most sellers are overbooked on rated tonnage as measured by the minimum set-aside they are compelled to provide for DO-rated requirements. And expectations are that the set-aside tonnage will be increased in step with enlarging demands for military and related account. Consequently, there is little chance any additional tonnage will become available for the general market soon.

Producers' rolling schedules are booked through April on current rated tonnage including set asides for the freight car program, warehouses and nonintegrated interests.

Cincinnati—The steadily rising tide of rated tonnage in sheets will be felt when March allotments for civilian needs are announced. District mills are working out schedules on a month-by-moth basis.

St. Louis—Reiceipt of DO rated cold-rolled sheet orders in this district is picking up. Mills are booked to around May 1 on their 10 per cent of capacity set-aside. A little galvanized sheet tonnage is open in April. First indications of non-rated sheet demand easing in the wake of civilian goods curtailments are noted.

Pittsburgh—Sellers anticipate NPA action soon raising maximums on DO rated order acceptance from 10 to 15 per cent on hot and cold-rolled sheets. The 5 per cent maximum applying to enameling and galvanized grades may be left unchanged but silicon sheets likely will be increased to 10 per cent reflecting unusually heavy motor requirements involved in large order backlogs for machine tools, steel mill facilities, etc.

Plates . . .

Plate Prices, Page 125

New York—Plate producers generally have filled their schedules for March as the 45 day lead time has now been reached. Some mills will have less nonrated tonnage to offer in March than in February. This is ascribed to a steady increase in DO-rated tonnage, with most mills finding it necessary to accept more than the 15 per cent minimum quota beyond which they are not compelled to go.

Nothing yet has been heard with respect to rated requirements of railroad car builders for second quarter. However, it is generally believed there will be no stepping up in steel allocations for that period. Meanwhile, car builders have not yet been able to reach the goal of 10,000 cars per month and probably won't this quarter.

Philadelphia—Pressure for plates is unabated, particularly for cars, oil and gas lines and tanks, with emphasis on the light gages. Jobbers are after far more than the mills can supply. Machinery and equipment builders are seeking increasing amounts.

Ship requirements are still lagging, but with both merchant marine and navy programs shaping up rapidly, ship needs will be an important factor before the year is over. The maritime administration will open bids Jan. 31 on fifty 12,500 deadweight ton merchant ships, 525 feet long, and having a speed of at least 20 knots.

Last week the Armed Services Committee of the House of Representatives unanimously approved authorization for the construction of 173 naval vessels, having a combined displacement tonnage of 500,000 tons, and the conversion of 1,000,000 tons of existing shipping. Proposed new work will include a 60,000-ton aircraft carrier.

Proposed locomotive building and maintenance program, if any, when set up for voluntary allocations, will require at least 70,000 tons of miscellaneous steel per month.

Pittsburgh—Fabricators anticipate a continued diminishing tonnage of plates available throughout 1951 for commercial account and consequently are restricting bookings to contracts of "rated" nature wherever possible. Shortage of plates is more critical than standard shapes, although some relief may be in the offing later this year through conversion of some strip mill capacity to production of plates. Some fabricators say they soon will be forced to furlough employees due to the general steel shortage.

Chicago—It is estimated that plate tonnage to be available for civilian use in February will be about 50 per cent of the average for the first nine months of last year. Each month sees DO and support programs bite

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deeper into the free supply. Report has it the merchant ship program will call for heavier and longer plates than were used in World War II.

St. Louis—For the first time since early postwar, Granite City Steel Co. is back in regular plate production, currently delivering 2300 tons monthly to the freight car program. That figure is due to rise to 3600 tons soon under DO orders.

Birmingham—Plate supply falls far short of demand. Mills are unable to divert additional ingots to plate production. Demand is out of proportion to production capacity.

Seattle—Plate shops report numerous small jobs but with steel on allocation and supplies tight, operations are handicapped. Contracts have been placed for approximately 500 tons involved for tank projects at Hanford works.

Structural Shapes . . .

Structural Shape Prices, Page 125

New York—While new structural orders have been light of late, much work is being figured, principally of public character. Fabricators have heavy order backlogs. Most large and medium sized shops are now unable to promise much before late in the year or early in 1952. Were shapes and other plain materials in normal supply, they would feel justified in making better promises, but prospects for obtaining more than the restricted volume they are now receiving are dim.

Philadelphia—Structural orders are lagging compared with several weeks ago, ascribed in part to seasonal conditions and to the extended delivery promises of fabricating shops. Virtually all are booked up months ahead on the basis of present restricted receipts of plain material. Some are booked ahead more than a year.

Pittsburgh—Large structural steel requirements for steel mill expansion programs are expected to be satisfied as needed through NPA assistance. Some fabricators are operating well below capacity due to the general steel shortage, a situation which likely will be further accentuated over coming months in direct ratio to extent these interests are successful in booking contracts of essential classification. Dinardo Inc., Pittsburgh, is low on the general contract for a state highway project at Banksville Circle in Pittsburgh, and low on general cotract for a state highway project at Banksville Circle in Pittsburgh, involving 1480 tons of structural shapes and 863 tons of reinforcing bars. Same company is low on state highway bridges, Section 3B and 4B at Carnegie, Pa., requiring 3186 tons of shapes and 951 tons of reinforcing bars.

Birmingham—Demand for structurals is consistent though not spectacular. Fabricators are busy but most tonnage is projected into the future.

Seattle—Bethlehem Pacific Coast steel Corp., second low at $1,432,053, was awarded 16,400 tons of transmission towers and accessories by Bonneville Power Administration, materials for the 230-kv Big Eddy-Troutdale line.

Tin Plate . . .

Tin Plate Prices, Page 126

Pittsburgh—NPA regulation governing end-use of tin plate is expected momentarily. It likely will follow the pattern in effect throughout the last war. Official action by NPA had been scheduled for Jan. 10, but was delayed a few days.

Sharp expansion in the industry's electrolytic capacity, compared to only one line in operation at start of last emergency, should take some of the pressure off too drastic controls on tin plate end-use at this time. Three new electrolytic lines are expected to be ready for operation this year. Still others are scheduled for 1952.

While deadline on lead time for February tin plate production was Dec. 15 and is Jan. 15 for issuance of March specifications, mills are not likely to experience much difficulty revising coating weight specifications where necessary in compliance with anticipated NPA regulations.

Semifinished Steel . . .

Semifinished Prices, Page 125

Pittsburgh—Extremely tight supply in semifinished steel products is expected to prevail throughout 1951. Increasing tonnage demand from forging companies and other customers for direct military programs is developing.

Sheet bar supply is inadequate and shows no signs of improving. This situation presents a major obstacle to full utilization of marginal hand sheet mills. One hand mill operator is obtaining about 4000 tons of sheet bars monthly from France, representing but a small portion of total requirements.

Domestic carbon sheet bars currently are offered on limited tonnage basis within the wide range of $90 to $135 per ton.

Wire . . .

Wire Prices, Page 127

Cleveland—Wiremakers see little prospect of any material improvement in supply conditions over coming months. Increasing demand for defense requirements is reflected in rising volume of rated orders on books. In turn tonnage earmarked for so-called nonessential consumption is shrinking.

Birmingham—The shortage in wire products is being felt acutely in rural areas. Fencing, nails, sheets, galvanized and roofing, angle bars, rods and various other specifications are on the scarcity list.

Fluorspar . . .

Fluorspar Prices, Page 128

New York — Imported fluorspar prices have undergone further advance, the metallurgical grade now holding around $34-$35 per net ton, duty paid. This follows abrogation of the Mexican treaty Jan. 1, which originally had reduced the duty on fluorspar from $8.40 to $6.30. With the Mexican treaty no longer in effect the old duty of $8.40 has gone back into force. Late last year and prior to the abrogation of the treaty the imported market had advanced to $32-$33 under increasing pressure of demand.

Pig Iron . . .

Pig Iron Prices, Page 124

New York—As deliveries on foreign pig iron become more extended, some importers being booked up throughout first half, there is an increasing disposition to quote prices on the basis of the market ruling at time of shipment. This is due to uncertainties with regard to future production costs on the other side, foreign exchange and ocean freight rates. This has served to place a damper on buying, although some tonnage is still available at firm prices even on the more extended deliveries. Nearby tonnage is usually available in comparatively small lots. Perhaps Chilean iron is in best supply at the moment. This iron has only recently been placed on the market, at prices ranging around $67, duty paid.

Philadelphia—Some badly needed foreign iron arrived here last week comprising about 70,000 tons from the Netherlands. Another cargo of around 8000 to 9000 tons of Brazilian iron is expected late this month. Some Chilean iron is enroute, and a fairly steady flow from various sources is expected over remainder of the first half. Sellers of Chilean iron, the latest to enter the market, are booked through first quarter. Meanwhile, European sellers are having increasing difficulty obtaining export licenses from their own governments.

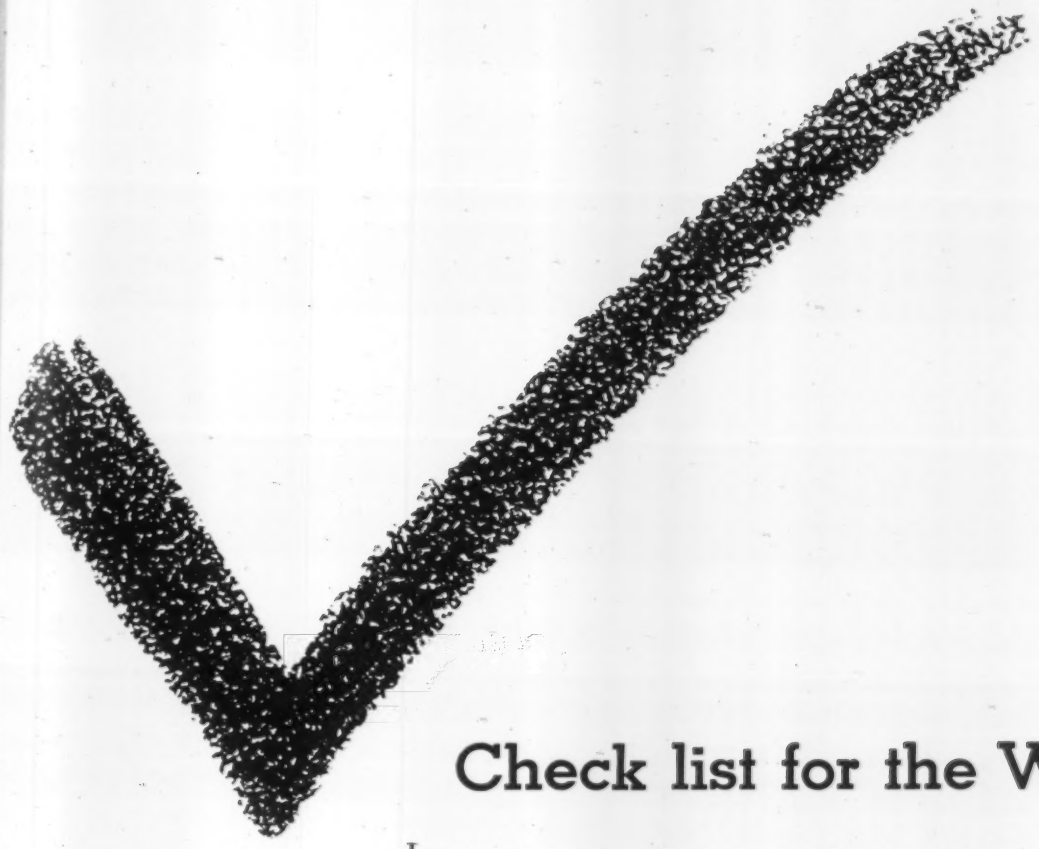
Pittsburgh—Most jobbing foundries have raised casting prices about 10 per cent to offset increases of $2 to $8 per ton in coke, pig iron, refractories and cast scrap, in addition to an advance of 7½ cents an hour in wage costs since September.

Order volume among jobbing shops is well sustained, with these interests operating one shift 5 days per week. Substantial reduction in orders among foundries serving consumer durable goods manufacturers is noted. Foundries producing heavy machinery castings and specialties in connection with steel mill, aluminum, and other expansion programs expect to be active throughout 1951. Military orders for armor castings for tanks, etc., have improved markedly with suppliers booked into 1952.

Union Steel Castings Division, Blaw-Knox Co. is constructing a building addition that will enclose more heat treating and shipping facilities, which should increase capacity about 400 per cent for cast armor castings.

Producers are scheduled to meet in Washington this week to help prepare NPA regulations covering the distribution of pig iron. The plan is expected to minimize cross hauling and likely will be based on individual producers' base period distribution pattern adjusted to meet increased requirements of foundries serving the railroad freight car and other classified programs.

Buffalo—Talk is heard here of in-



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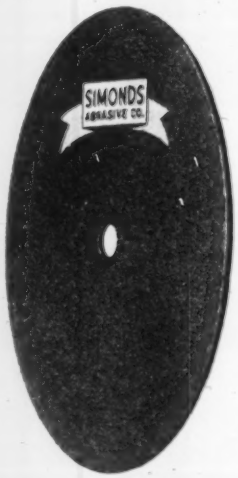

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creased use of foreign iron as current domestic output fails to meet requirements.

Cleveland — Pig iron supply continues to tighten but no foundry shutdowns for lack of iron are reported yet. Merchant sellers are allocating tonnage as equitably as possible and so far have been able to provide all of their customers with enough tonnage to keep them going. Meanwhile, some foundries have been showing increased interest in foreign iron. However, prospects for relief on this score are limited, word in the trade here being that little additional import tonnage is available until mid-year. One lot of 100 tons of special-grade foreign iron, containing some vanadium, was bought in this district recently at around $75 per ton delivered.

Chicago—Pig iron market pattern is holding unchanged with suppliers allocating tonnage to foundries under a rigid program. Gray iron shops are estimated to be operating at about 75 per cent of capacity despite the fact orders would justify full capacity. The operating rate is of necessity geared to iron and coke supply. Foreign iron continues to be offered here at prices ranging between $90 and $100 laid down, but delivery does not prove to be as good as promised.

St. Louis—Iron makers are watching closely the coming scrap controls for effect on pig iron demand. Blast furnaces are under steadily mounting pressure and would welcome some relief from the scrap market. However, it is believed locally that a $5 to $10 scrap rollback would be required to ease pig demand noticeably. With foundry iron, for example, at $55 and cast scrap at $58 it would take more than a $3 drop in the latter to offset pig iron's advantage of content control and guaranteed analysis.

Los Angeles—Foundries, working 45 hours weekly, are having trouble whittling down 6-8 week backlogs.

Seattle — Foundry operations are well above normal partially due to scattered defense contracts. Foreign pig iron is arriving frequently.

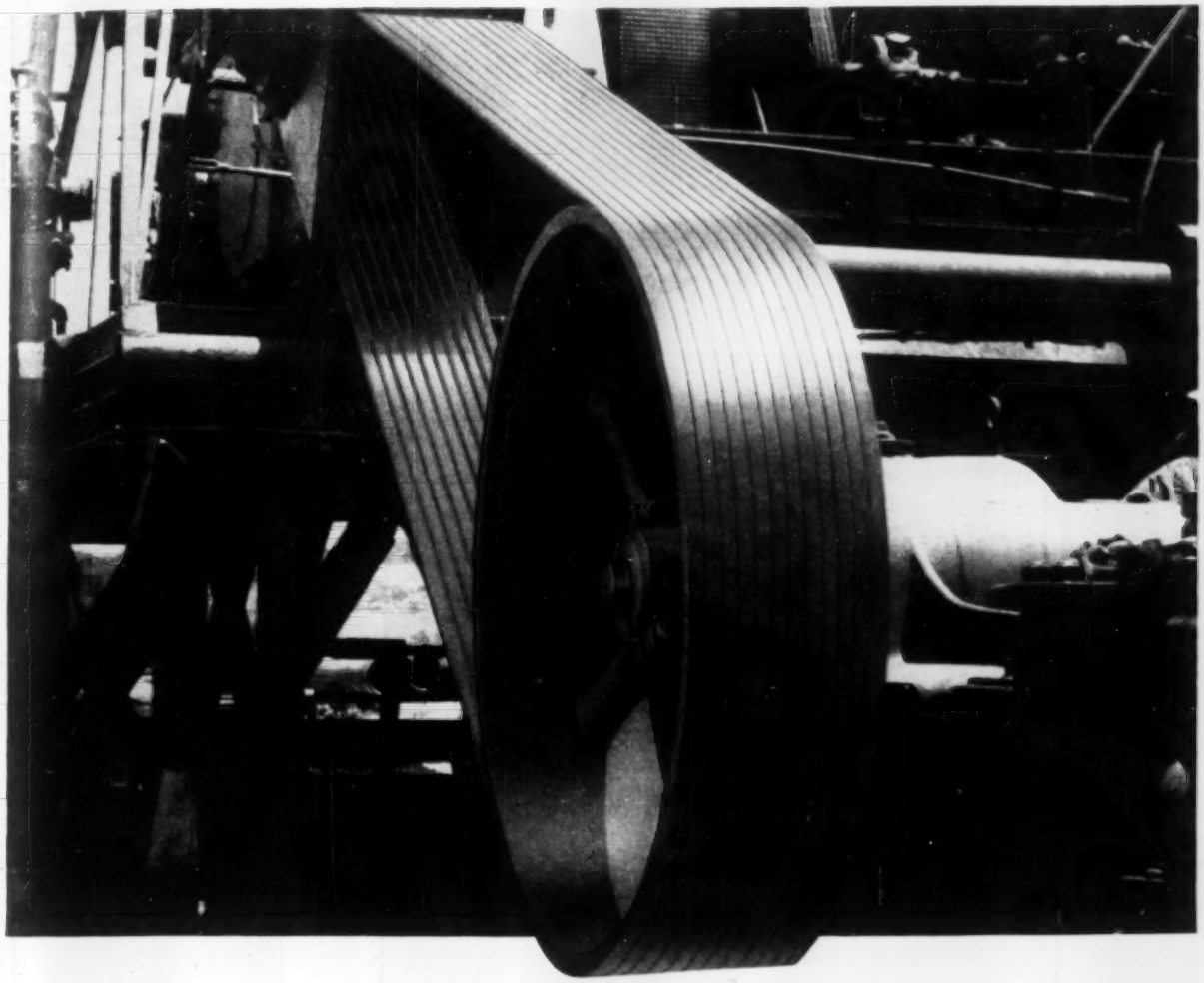
Metallurgical Coke . . .

Metallurgical Coke Prices, Page 128

Detroit—Ford Motor Co. will expand metallurgical coke capacity from the present annual figure of 1,225,000 net tons to 1,430,000 tons. The program, which involves building 37 coke ovens at the Rouge Plant to bring the number there to 220, will start in the spring.

Coke from the facility will be used to support operation of the three Ford blast furnaces and to supply Ford's foundry facilities. These are being expanded by the production foundry to serve the new Cleveland engine plant, and by two increases in the Detroit area. A new specialty foundry to produce crankshafts and valves is being constructed at the Rouge and the Dearborn iron foundry, previously called the production foundry, is being expanded.

In addition to the new coke ovens, a new coke screening plant will be constructed. In the coal chemicals plant six light oil scrubbers and two ammonia stills will be replaced with modern equipment.



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Scrap . . .

Scrap Prices, Page 132

New York—Brokers' buying prices continue unchanged pending outcome of discussions in Washington. Most grades will be subject to a rollback. Indications are that most pronounced action will be in cast grades and specialties and for this reason some consumers of these grades are not pressing for as much tonnage as they might otherwise. Others are ordering all they can handle on the assumption that these grades, as well as steel scrap, are going to be scarce for a considerable time to come.

Philadelphia—Pending outcome of price discussions in Washington, scrap prices generally are unchanged in this district. Extent of the expected rollback has not been officially revealed. Indications are that a reasonable grace period will be allowed for the winding up of current contracts once a final decision as to prices has been made. Some interests believe ceilings may not become effective until Mar. 1. Consumers of steel scrap are pressing for all the tonnage they can obtain, not waiting for any cuts that may be announced later. As there is a possibility of much more substantial rollback in some specialties and cast grades, there is less pressure from consumers of these materials, especially where they have at least fair inventories on hand.

Pittsburgh—Leading mills delay re-entering the market for large tonnages of dealer scrap pending action on price controls. There is still some unshipped tonnage for which commitments were made when the mills established multiple basing point prices. Railroads also owe tonnage on previous sales and have made no effort to advertise additional lists since requested by ESA to notify the agency, at least 7 days prior to date future lists will be offered, of the grades and prices expected.

Conjecture is No. 1 heavy melting steel price here will be rolled back $1.50, possibly more. Weakness already is reported in railroad specialties but there are no sales substantiating lower quotations. In addition to railroad specialties, current cast scrap prices are held to be too high. Substantial reduction in quotations for these grades is anticipated.

Another aspect of the cast market is the possibility one price will be established at all major centers with normal differentials for various grades, in contrast to the different prices at various basing points anticipated in the price control regulation for open-hearth scrap.

Buffalo—New business in scrap is virtually at a standstill as the trade awaits government control action on prices and supplies. With one of the leading mill consumers showing a decided shrinkage in reserve stocks, interest in supplies became more apparent.

Detroit—Some foundry interests, who have sufficient scrap supplies to stay out of the market in the hope that price control is imminent, are doing so to give the market some semblance of weakness. However, bulk of cast buying is at the previ-

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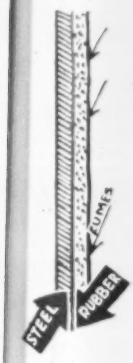

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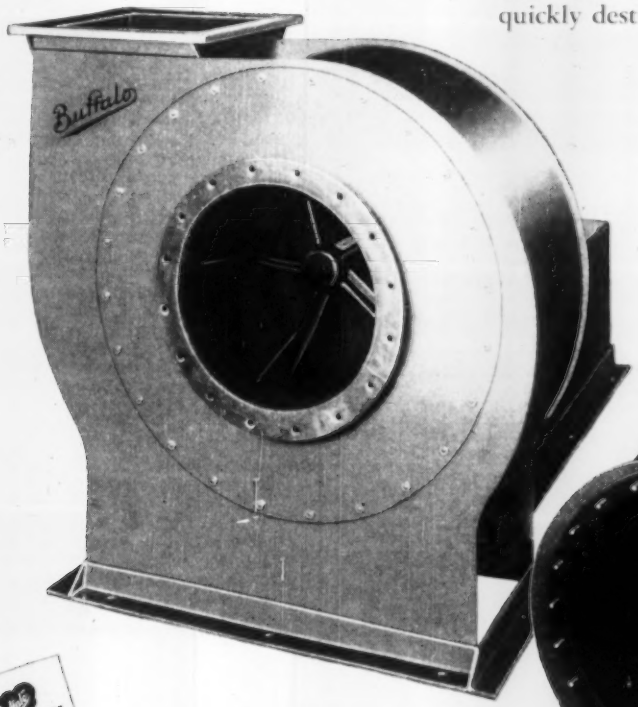

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ous levels and dealers are not cutting prices to attract business. Open-hearth grades are still in a split market, although the percentage moving at formula levels is rising.

Cleveland—Consensus in the scrap trade here last week was that the pending rollback in prices would be a minimum of $1.50 a ton. Prospect of lower prices has stimulated the movement of material to an exceedingly fast pace all along the line. Despite unusually heavy shipments, receipts by mills are not much in excess of current needs. Comparatively little stocking is being done by consumers. Published prices are unchanged, although some material is moving at levels above the formula.

Cincinnati—Prices on iron and steel scrap remain unchanged as dealers await further word from conferences on controls. The convention drew principals in the market, a factor tending to restrict trading. Most dealers are releasing accumulations, whereas rail lists lag.

Chicago—Lessened buying by consumers while ESA and scrap industry leaders work out details of price scheduling and allocations continues to exert a softening effect on prices here. Foundries in particular are purchasing only for short term needs until the situation is clarified. Fear of suppliers is that foundries may be working "too close to their belts" and may turn up short on material a few weeks hence. Activity in railroad grades has been at a standstill since Dec. 26 when ESA asked the carriers to halt sales until seven days notice of price to be charged is given. Flow of scrap on current orders still is retarded by snow and cold weather in the midwestern area which have hampered preparation and loading.

St. Louis—Scrap consumers are holding off buying pending an anticipated price rollback. Dealers are using the lull to build grounds stocks, but bad weather and poor shipments are hindering it. Opinion here is the 60-day inventory allowed dealers will be followed by a 45-day limit on consumer ground stocks. Since local mills and foundries currently have considerably under 45-days, dealers expect a moderate buying spurt after ceilings, expected to be moderate, are set.

San Francisco—Steelmaking grades of scrap are steady at the established prices. Supplies are not abundant, but are coming in at a fairly steady pace.

Seattle—Inflow of cast iron scrap to foundries is increasing with sellers evidently seeking to establish firm price levels before government ceiling prices are fixed. The market appears very firm.

Rails, Cars . . .

Track Material Prices, Page 127

New York—Domestic freight car orders in December amounted to 3362 units bringing the total for the year to 156,481, according to a joint announcement by American Railway Car Institute and Association of American Railroads. This is the largest number of new cars placed in any year since 1922. Deliveries last month involved 5700 cars against 5791 in November and 3330 in December, 1949. The desired goal of 10,000 cars monthly may not be reached before April or May. Backlogs on orders Jan. 1 involved 124,489 cars against 126,870 on Dec. 1 and 12,036 a year ago.

Warehouse . . .

Warehouse Prices, Page 129

Pittsburgh—Unbalanced and depleted inventories are expected to force a noticeable decline in warehouse shipments throughout first half from levels prevailing in third and fourth quarters last year. Mill deliveries to warehouse accounts were fairly well sustained in the closing months of 1950, but distributors are concerned over the supply outlook in view of the increasing volume of preferred tonnage mills must set aside prior to shipment for warehouse account. Distributors' yearend inventories of major steel products were 40 to 50 per cent under last year.

Cleveland—Warehouse stocks continue to shrink under impact of strong demand and limited receipts from the mills. Inventory position of the distributors has not been materially improved by NPA order M-6 which is designed to assure continuance of mill shipments to supply stores. The simple fact is tonnage taking precedence over warehouse needs is so heavy the mills cannot materially enlarge their shipments to the distributors who as yet are entertaining only a limited amount of DO orders.

Cincinnati—Deliveries of steel from warehouses are slowing down, due to deteriorating inventories. Moreover, unless there is relief through government sources, the supply outlook for the entire quarter is none too bright.

Chicago—Although warehouses report receipts aggregate close to allocations set up by the mills under M-6 the tonnage is far from sufficient to satisfy heavy demand from consumers. Sales, therefore, must be handled on a quota system. DO orders are not increasing at a rapid rate largely because subcontracts have not yet been fanned out by prime contractors.

Birmingham—Warehouse stocks are barely holding their own. Which means stocks are far from adequate.

San Francisco—Shortages in some warehouse steel items are so severe DO ratings do not mean much. Worse off are unrated orders.

STRUCTURAL SHAPES . . .

STRUCTURAL STEEL PLACED

16,400 tons, transmission towers and accessories for Bonneville Power Administration 230-kv Big Eddy-Troutdale power line, to Bethlehem Pacific Coast Steel Co., Seattle, second low $4,432,053.

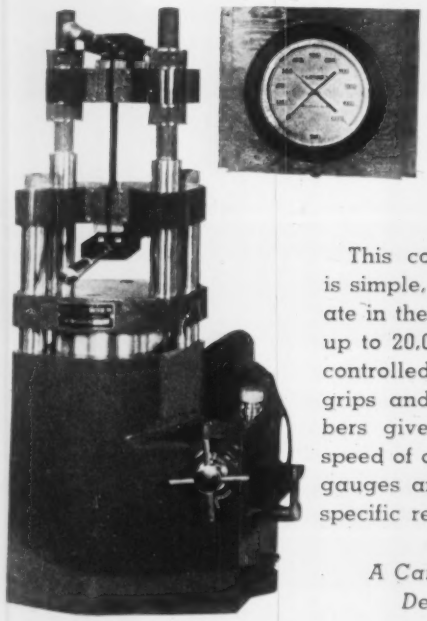
2000 tons, diesel engine shop, Argentine, Kans., for Santa Fe System, to Kansas City Structural Steel Co., Kansas City, Kans.

1737 tons, bridge, North Omaha, Nebr., for North Omaha Bridge Commission, to Midland Structural Steel Co., Hammond, Ind., for fabrication by Allied Structural Steel Companies, industrial contracting company, Minneapolis.

1000 tons, Erie Railroad bridge, Jersey City, N. J., to American Bridge Co., Pittsburgh.

600 tons, state bridge work, Lehigh county,

A practical **TENSILE TESTER**



FOR

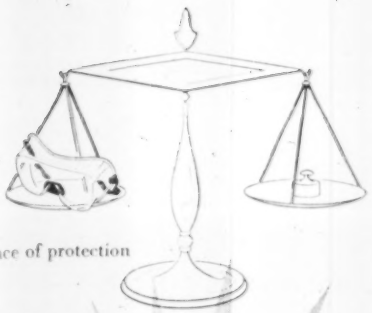
Spotwelds, Strip, Wire, etc.

This compact, 34" high machine is simple, accurate and fast to operate in the testing of tensile strengths up to 20,000 pounds. . . . An easily-controlled ram with handy specimen grips and adjustable pulling members give this tester its ease and speed of operation. . . . Various load gauges and grips are available for specific requirements.

A Card or Letter Will Bring Descriptive Literature

DETROIT TESTING MACHINE CO.

9390 Grinnell Avenue • Detroit 13, Michigan

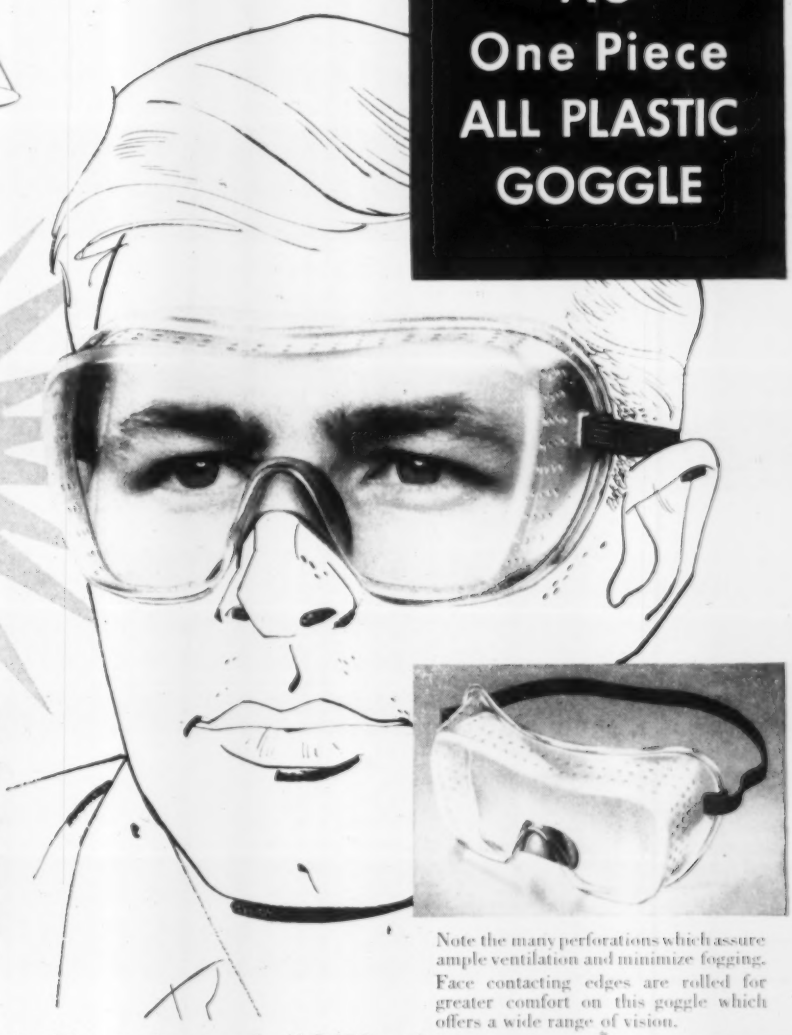


One ounce of protection

AO One Piece ALL PLASTIC GOGGLE

AO's NEW INEXPENSIVE ALL PLASTIC GOGGLE

LIGHTWEIGHT
NON-FOGGING
WELL-VENTILATED
NON-FLAMMABLE
WELL-FITTING



Note the many perforations which assure ample ventilation and minimize fogging. Face contacting edges are rolled for greater comfort on this goggle which offers a wide range of vision.

Goggle fits comfortably over most personal glasses with nosepiece hugging nose snugly.

Made of impact resisting plastic, this one-piece goggle (AO479 Clear, AO480 Green) is "optically correct" and meets government specifications. It affords exceptional wide angle vision and can be worn over most standard types of personal glasses and most prescription spectacles and goggles. Recommended for protection against foreign particles striking from any direction on the following types of work: babbiting, chipping, cutting rivets, grinding, hand-tool operations, machine operations, spike driving and similar operations. Your nearest AO Safety Products Representative can supply you.

QUICK FACTS
479-480 GOGGLE

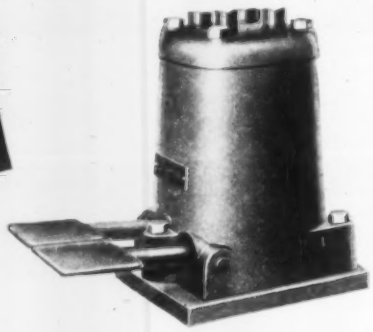
One size only but designed to fit all faces comfortably
Elastic headband, easily adjusted
4 point contact to face of wearer, resists rocking
Plastic nosepiece fits all noses comfortably and snugly
Rolled edges for comfort, better fit in contacting face
Order by number 479 Clear
Order by number 480 Green

American Optical COMPANY
SAFETY PRODUCTS DIVISION

SOUTHBRIDGE, MASSACHUSETTS • BRANCHES IN PRINCIPAL CITIES

Quick-As-Wink
AIR AND HYDRAULIC
Control Valves

No. 3401-R-4
½ Inch 4-Way
Foot Valve



FOOT OPERATED Air Valves

Increase output of hammers, shears, presses, etc.

● Operators have both hands free to handle the work—speeding production. Valving mechanism has stainless steel body and push-pull rods, brass sleeves, self-sealing U-packers and many other refinements, all fully enclosed against dirt, assuring long efficient trouble-free operation. Convenient pipe connections. No metal to metal seating. ⅜" to 1" sizes, 3-way and 4-way, neutral position and regular actions. *Write for full details.*

THE HIGHER THE PRESSURE THE TIGHTER THE SEAL

Quick-As-Wink
AIR AND HYDRAULIC
Control Valves

Hand, Foot, Cam, Pilot, Diaphragm and Solenoid Operated

Mfd. by C. B. HUNT & SON, INC., 1927 East Pershing St., Salem, Ohio

Handling BAGGED GOODS?

Do it FASTER—more EFFICIENTLY with a POWELL Job-Designed container . . .

Style 412
WHSE Stacking Unit

Container pictured here was Job-Designed by Powell to safely and efficiently transport and store bags of carbon black and synthetic rubber elements for a leading rubber manufacturer.

It affords easy accessibility to a single bag or a container full. Can be used as a bin. Speeds production and inventory. Keeps storeroom neat. Tiers to any desired height.

Powell Job-Designed equipment best suits the job, because it was built for the job. Powell representatives in principal cities.

Send inquiries to Dept. 311

POWELL PRESSED STEEL SINCE 1920

THE POWELL PRESSED STEEL CO. • HUBBARD, OHIO
ORIGINATORS OF COLD FORMED ALL STEEL HANDLING EQUIPMENT
(In Greater Youngstown)

Pennsylvania, to Bethlehem Steel Co.
477 tons, factory building, Massey-Harris Co., Racine, Wis., to Bethlehem Steel Co.
450 tons, plant addition, Heintz Mfg. Co., Philadelphia, to Bethlehem Fabricators Inc., Bethlehem, Pa.
253 tons, bridge, F-66-(24), Waukesha county, Wisconsin, to Milwaukee Bridge Co., Milwaukee.
220 tons, store, Scranton, Pa., to Anthracite Bridge Co., that city.
138 tons, bridge, section 141-B, Iroquois county, Illinois, to Bethlehem Steel Co.; Triangle Construction Co., Kankakee, Ill., contractor.
130 tons, Alaska bridges, to Pacific Car & Foundry Co., Seattle; J. J. Badraun, Seattle, general contractor.
110 tons, bridge, S-1544 (1), Marinette county, Wisconsin, to Milwaukee Bridge Co., Milwaukee.

STRUCTURAL STEEL PENDING

6000 tons, veterans hospital, around 23rd street and East river, Manhattan, New York; bids asked.
3186 tons, state highway bridges, sections 3B and 4B, Carnegie, Pa.; Dinardo Inc., Pittsburgh, general contractor, low.
2000 tons, central heating and power plant, Fort Richardson, Alaska; bids to U. S. Engineer, Seattle, Jan. 10.
1480 tons, state highway project, Banksville Circle, Pittsburgh; Dinardo Inc., Pittsburgh, general contractor, low.
800 tons, reconstruction of the Willis avenue bridge, Manhattan, New York; bids asked by Municipal Department of Public Works.
700 tons, bridge, Reading Co., Reading, Pa.; bids closed Jan. 15.
419 tons, bridge, section 42SF-9, Cook county, Illinois; bids Jan. 19.
350 tons, warehouse Associated Grocers, Pittsburgh; bids closed Jan. 12.
300 tons, bridge, section 146F, St. Clair county, Illinois; bids Jan. 19.
250 tons, administration building, Delaware River Toll Commission, Morrisville, Pa.; new bids asked Jan. 30.
100 tons, plant, Du Pont interests, Penn Grove, Pa.; bids Jan. 15.
Unstated, 99 x 260 foot permanent warehouse, McNary dam; bids to U. S. Engineer, Walla Walla, Wash., Jan. 24.

REINFORCING BARS . . .

REINFORCING BARS PLACED

470 tons, Service Center Bldg., Rochester, Minn., to United States Steel Supply Co., Chicago.
470 tons, Philip Morris & Co., Louisville, Ky., to United States Steel Supply Co., Chicago.
200 tons, 38 family apartments, Fort Richardson, Alaska, to Northwest Steel Rolling Mills Inc., Seattle.
190 tons, paving, LR 902, Indiana county, Pennsylvania; to Bethlehem Steel Co.
160 tons, hospital, McKeesport, Pa., to Linde Co., Pittsburgh.
135 tons, barrel house, Standard Oil Co. (Indiana), Whiting, Ind., to United States Steel Supply Co., Chicago.
130 tons, reactor engineering building, Argonne National Laboratory, DuPage county, Illinois, to United States Steel Supply Co., Chicago; Lee Construction Co. Inc., Chicago, contractor.
115 tons, School of Industrial Administration, Carnegie Institute of Technology, Pittsburgh, to W. N. Dambach Inc., that city.

REINFORCING BARS PENDING

5000 tons, second unit Seattle viaduct; bids to Olympia, Wash., Jan. 16; postponed from Jan. 9.
1400 tons, power plant, Illinois Public Service Co., Hutsonville, Ill.; bids in.
951 tons, state highway bridges, sections 3F and 4B, Carnegie, Pa.; Dinardo Inc., Pittsburgh, general contractor, low.
890 tons, Twin Towers Apartments, Chicago, bids in.
863 tons, state highway project, Banksville Circle, Pittsburgh; Dinardo Inc., Pittsburgh, general contractor, low.
863 tons, road work, LR 766, Allegheny county, Pennsylvania.
314 tons, Central Junior high school, Rock Island, Ill.; C. H. Langman & Son, Rock Island, Ill., general contractor.
235 tons, Easterly sewage treatment works, Altoona-Blair counties, Pennsylvania.

200 tons, Shelby Mutual Insurance Bldg., Cleveland.
150 tons, sewage treatment plant, Orrville, O.
150 tons, Akron Express system, Akron, O.
148 tons, garage, Hall Chevrolet Co., Milwaukee.
135 tons, Albion College, Albion, Mich.
120 tons, power station boiler room, Iowa-Illinois Gas & Electric Co., Moline, Ill., Sargent & Lundy, Chicago, engineers.
117 tons, bridge, North Omaha, Neb., for North Omaha Bridge Commission.
100 tons, office building, Z. Frank Inc., Chicago; bids in.
100 tons, annealing furnaces, Ford Motor Co., Dearborn, Mich.

PLATES . . .

PLATES PLACED

500 tons, tanks for eastern Washington government installation to Puget Sound Sheet Metal Works, Seattle; Chicago Bridge & Iron Co., Seattle, and Willamette Iron & Steel Co., Portland, Oreg.

PLATES PENDING

Unstated, four discharge pipes Lookout Point dam, Oregon; Guy F. Atkinson Co. and Willamette Iron & Steel Co., Portland, Oreg., sole bidders (joint) $223,480.

PIPE . . .

CAST IRON PIPE PENDING

250 tons, 8 inch cast iron pipe, for local improvement project; bids received by Seattle Jan. 5.

RAILS, CARS . . .

LOCOMOTIVES PLACED

Central of New Jersey, 31 diesel-electric units, comprising fourteen 1600-hp general utility units and one 1000-hp road-switching unit, awarded the American Locomotive-General Electric Companies, Schenectady, N. Y.; nine 1200-hp switching units, awarded Electro-Motive Division, General Motors Corp., La Grange, Ill.; and seven 1200-hp switching units, awarded the Baldwin-Lima-Hamilton Corp., Eddystone, Pa.

Illinois Central, 44 diesel-electric units, to Electro-Motive Division, General Motors Corp., La Grange, Ill.; order includes four 22-56-hp passenger units; thirty-five 1200-hp, three 1500-hp and two 600-hp switchers.

LOCOMOTIVES PENDING

Northern Pacific, six 6000-hp diesel-freight locomotives and three 1500-hp diesel road switchers; early award contemplated.

RAILROAD CARS PLACED

Northern Pacific, 500 box cars and 100 covered hoppers to the company's Brainard, Minn., shops, and 250 gondolas to commercial shops.

FERROALLOYS

(*Continued from page 129*)

Si 4-6%, Mn 4-6%, C 4-6%). Add 1.1c to high-carbon ferrochrome prices.

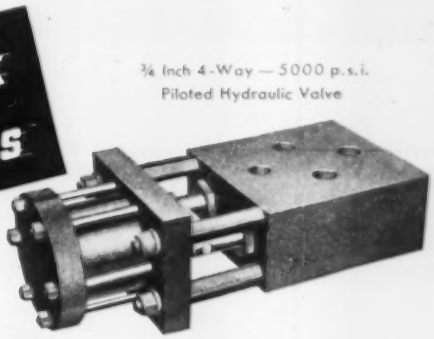
Low-Carbon Ferrochrome: (Cr 67-72%.) Contract, carload, lump, bulk, max. 0.03% C 33.60c per lb of contained Cr, 0.04% C 31.50c, 0.06% C 30.50c, 0.10% C 30.00c, 0.15% C 29.75c, 0.20% C 29.50c, 0.50% C 29.25c, 1% C 29.00c, 1.50% C 28.85c, 2% C 28.75c. Carload packed add 1.1c, ton lot add 2.2c, less ton add 3.9c. Delivered. Spot, add 0.25c.

Low-Carbon Ferrochrome, Nitrogen Bearing: Add 5c to 0.10% C low-carbon ferrochrome prices for approx. 0.75% N, add 5c for each 0.25% of N above 0.75%.

Foundry Ferrochrome, High Carbon: (Cr 62-66%, C 5-7%). Contract, c.l. 8 M x D, bulk, 23.25c per lb of contained Cr, c.l., packed 24.15c, ton 25.50c, less ton 27.25c. Delivered Spot, add 0.25c.

Foundry Ferrochrome, Low Carbon: (Cr 50-54%, Si 28-32%, C 1.25% max.) Contract, Carload, packed, 8 MxD, 16.10c per lb of alloy; 1 ton 16.95c; less ton lot, 18.15c, delivered; spot, add 0.25c.

Low-Carbon Ferrochrome Silicon: (Cr 34.41%, Si 42-49%, C 0.05% max.) Contract, carload, lump, 4" x down and 2" x down, bulk, 21.75c per lb of contained chromium plus 12.00c per pound of contained silicon; 1" x down, bulk 20.65c per pound of contained chromium plus



¾ Inch 4-Way — 5000 p.s.i. Piloted Hydraulic Valve

PILOT OPERATED Hydraulic Valve

For hydraulic systems to 5000 p. s. i.

● Designed for controlling double acting hydraulic cylinders. The pilot cylinder is controlled by any type of 4-way air valve and is operated either automatically or manually from a convenient control station. Machined steel housing, hard chrome plated ground and polished stainless steel plungers, molded packers sealed by valve pressure. All parts readily accessible without disturbing the piping. ½" to 4" sizes. *Write for full details.*

Quick-As-Wink
AIR AND HYDRAULIC
Control Valves

Hand, Foot, Cam, Pilot, Diaphragm and Solenoid Operated

Mfd. by C. B. HUNT & SON, INC., 1924 East Pershing St., Salem, Ohio

2 GREAT, NEW PORTER CUTTERS

for cutting extremely hard materials, including stainless steel

PORTER CARBIDE EDGED CUTTER

Another important Porter development for cutting extra hard materials, such as stainless steel rods, wires, pins, etc. Tough carbide edges are firmly brazed to cutting jaws. Stands up under the toughest usage! Pays for itself many times over. #3CE cuts up to ⅜" dia. #4CE cuts up to ½" dia.

for cutting hot steel bars, rods, wires, etc.

PORTER HOT METAL CUTTER

An ideal tool for steel mills and fabricating plants. Made of special hot work steel and special heat-treated jaws, for long life under continuous heavy duty with no loss to cutting edge temper.

#3HW cuts up to ⅜" dia. #4HW cuts up to ⅝" dia. Order through your industrial supply house!

H. K. PORTER, INC., 74 Foley Street, Somerville 43, Mass.

11.50c per pound of contained silicon, F.o.b. plant; freight allowed to destination.

Ferrochrome Silicon, No. 2: (Cr 36-39%, Si 36-38%, Al 7-9%, C 0.05% max.) 21.75c per lb of contained silicon plus 12.0c per lb of contained silicon plus aluminum, 3" x down, delivered.

Chromium Metal: (Min. 97% Cr and 1% Fe) Contract carload, 1" x D; packed, max 0.50% C grade, $1.08 per lb of contained chromium, ton lot $1.10, less ton $1.12. Delivered. Spot add 5c.

Tungsten Alloys

Ferrotungsten: (70-80%). Contract, 10,000 lb W or more, $3.25 per lb of contained W, 2000 lb W to 10,000 lb W, $3.35; less than 2000 lb W, $3.47. Spot, add 2c.

Tungsten Powder: (W 88.8% min.). Contract or spot, 1000 lb or more, $4.15 per lb of contained W; less than 1000 lb W, $4.25.

Silicon Alloys

25-30% Ferrosilicon: Contract, carload, lump, bulk, 19.00c per lb of contained Si; packed 20.40c; ton lot 21.50c, f.o.b. Niagara Falls, N. Y., freight not exceeding St. Louis rate allowed.

50% Ferrosilicon: Contract, carload, lump, bulk, 12.40c per lb of contained Si, carload packed 14.0c, ton lot 15.45c, less ton 17.1c. Delivered. Spot, add 0.45c.

Low-Aluminum 50% Ferrosilicon: (Al 0.40% max.) Add 1.3c to 50% ferrosilicon prices.

75% Ferrosilicon: Contract, carload, lump, bulk, 14.3c per lb of contained Si, carload packed 15.6c, ton lot 16.75c, less ton 18.0c. Delivered. Spot, add 0.8c.

80-90% Ferrosilicon: Contract, carload, lump, bulk 15.55c per lb of contained Si, carload packed 16.8c, ton lot 17.8c, less ton 18.95c. Delivered. Spot, add 0.25c.

Low-Aluminum 85% Ferrosilicon: (Al 0.50% max.) Add 0.7c to 85% ferrosilicon prices.

90-95% Ferrosilicon: Contract, carload, lump, bulk, 17.5c per lb of contained Si, carload packed 18.7c, ton lot 19.65c, less ton 20.7c. Delivered. Spot, add 0.25c.

Low-Aluminum 90-95% Ferrosilicon: (Al 0.50% max.) Add 0.7c to 90-95% ferrosilicon prices.

Silicon Metal: (Min. 97% Si and 1% max. Fe). C.l. lump, bulk, regular 20.0c per lb of Si, c.l. packed 21.2c, ton lot 22.1c, less ton 23.1c. Add 1.5c for max. 0.10% calcium grade. Deduct 0.4c for max. 2% Fe grade analyzing min. 96% Si. Spot, add 0.25c.

Alsifer: (Approx. 20% Al, 40% Si, 40% Fe.) Contract, basis f.o.b. Niagara Falls, N. Y., lump, carload, bulk, 8.65c per lb of alloy, ton lots packed 10.00c, 200 to 1999 lb 10.40c, smaller lots 10.90c.

Briquetted Alloys

Chromium Briquets: (Weighing approx. 3½ lb each and containing exactly 2 lb of Cr). Contract, carload, bulk, 14.50c per lb of briquet, carload packed 15.2c, ton lot 16.0c, less ton 16.9c. Delivered. Add 0.25c for notching. Spot, add 0.25c.

Ferromanganese Briquets: (Weighing approx. 3 lb and containing exactly 2 lb of Mn). Contract, carload, bulk 10.95c per lb of briquet, c.l. packaged 11.75c, ton lot 12.55c, less ton 13.45c. Delivered. Add 0.25c for notching. Spot, add 0.25c.

Silicomanganese Briquets: (Weighing approx. 3½ lb and containing exactly 2 lb of Mn and approx. ½ lb of Si). Contract, c.l. bulk 11.15c, per lb of briquet, c.l. packed 11.95c, ton lot 12.75c, less ton 13.65c. Delivered. Add 0.25c for notching. Spot, add 0.25c.

Silicon Briquets: (Large size—weighing approx. 5 lb and containing exactly 2 lb of Si) Contract, carload, bulk 6.95c per lb of briquet, c.l. packed 7.75c, ton lot 8.55c, less ton 9.45c. Delivered. Spot, add 0.25c.
(Small size—weighing approx 2½ lb and containing exactly 1 lb of Si). Carload, bulk 6.9c, c.l. packed 7.7c, ton lot 8.5c, less ton 9.40c. Delivered. Add 0.25c for notching, small size only. Spot, add 0.25c.

Molybdic-Oxide Briquets: (Containing 2½ lb of Mo each) $1.14 per pound of Mo contained, f.o.b. Langeloth, Pa.

Calcium Alloys

Calcium-Manganese-Silicon: (Ca 16-20%, Mn 14-18% and Si 53-59%). Contract, carload, lump, bulk 20.0c per lb of alloy, carload packed 21.0c, ton lot 22.3c, less ton 23.3c. Delivered. Spot add 0.25c.

Calcium-Silicon: (Ca 30-33%, Si 60-65%, Fe 1.50-3%). Contract, carload, lump, bulk 19.0c per lb of alloy, carload packed 20.2c, ton lot 22.1c, less ton 23.6c. Delivered. Spot add 0.25c.

Titanium Alloys

Ferrotitanium, Low-Carbon: (Ti 20-25%, Al 3.5% max., Si 4% max., C 0.10% max.). Contract, ton lots 2" x D, $1.40 per lb of contained Ti; less ton $1.45. (Ti 38-43%, Al 8% max., Si 4% max., C 0.10% max.) Ton lot $1.25, less ton $1.35, f.o.b. Niagara Falls, N. Y., freight allowed to St. Louis. Spot, add 5c.

Ferrotitanium, High-Carbon: (Ti 15-18%, C 6-8%). Contract $167 per net ton, f.o.b. Niagara Falls, N. Y., freight allowed to destinations east of Mississippi river and north of Baltimore and St. Louis.

Ferrotitanium, Medium-Carbon: (Ti 17-21%, C 3-4.5%.) Contract, $183 per ton, f.o.b. Niagara Falls, N. Y., freight not exceeding St. Louis rate allowed.

Vanadium Alloys

Ferrovanadium: Open-hearth Grade (Va 35-55%, Si 8-12% max., C 3-3.5% max.). Contract, any quantity, $3.00 per lb of contained Va. Delivered. Spot, add 10c. **Crucible-Special Grades** (Va 35-55%, Si 2-3.5% max., C 0.5-1% max.), $3.10. **Primos and High Speed Grades** (Va 35-55%, Si 1.50% max., C 0.20% max.) $3.20.

Grainal: Vanadium Grainal No. 1, 93c per lb; No. 6 63c; No. 79, 45c, freight allowed.

Vanadium Oxide: Contract, less carload lots $1.20 per lb contained V_2O_5, freight allowed. Spot, add 5c.

Zirconium Alloys

12-15% Zirconium Alloy: (Zr 12-15%, Si 39-43%, Fe 40-45%, C 0.20% max.). Contract, c.l. lump, bulk 7.0c per lb of alloy, c.l. packed 7.75c, ton lot 8.5c, less ton 9.35c. Delivered. Spot, add 0.25c.

35-40% Zirconium Alloy: (Zr 35-40%, Si 47-52%, Fe 8-12%, C 0.50% max.). Contract carload, lump, packed 20.25c per lb of alloy ton lot 21c, less ton 22.25c. Freight allowed. Spot, add 0.25c.

Boron Alloys

Ferroboron: (B 17.50% min., Si 1.50% max., Al 0.50% max., C 0.50% max.). Contract, 100 lb or more, 1" x D, $1.20 per lb of alloy. Less than 100 lb $1.30. Delivered. Spot, add 5c. F.o.b. Washington, Pa., prices 100 lb and over are as follows: Grade A (13-14% B) 75c per pound; Grade B (14-18% B) $1.20; Grade C (19% min. B) $1.50.

Borosil: (3 to 4% B, 40 to 45% Si), $5.25 per lb contained B, delivered to destination.

Bortam: (B 1.5-1.9%). Ton lots, 45c per lb; smaller lots, 50c per lb.

Carbortam: (B 1 to 2%) contract, lump carloads 9.50c per lb, f.o.b. Suspension Bridge, N. Y., freight allowed same as high-carbon ferrotitanium.

Other Ferroalloys

Ferrocolumbium: (Cb 50-60%, Si 8% max., C 0.4% max.). Contract, ton lot, 2" x D, $4.90 per lb of contained Cb, less ton $4.95. Delivered. Spot, add 10c.

Ferrotantalum—Columbium: (Cb 40% approx., Ta 20% approx., and Cb and Ta 60% min., C 0.30 max.) ton lots, 2" x D, $3.75 per lb of contained Cb plus Ta, delivered; less ton lots $3.80.

Silcaz Alloy: (Si 35-40%, Ca 9-11%, Al 6-8%, Zr 3-5%, Ti 9-11%, B 0.50-0.75%). Carload packed, 1" x D, 45c per lb of alloy, ton lot 47c, less ton 49c. Delivered.

SMZ Alloy: (Si 60-65%, Mn 5-7%, Zr 5-7%, Fe 20% approx.). Contract, carload, packed, ½" x 12 M, 17.5c per lb of alloy, ton lots 18.25c, less ton 19.5c. Delivered. Spot, add 0.25c.

Graphidox No. 4: (Si 48-52%, Ca 5-7%, Ti 9-11%). C.l. packed, 17.0c per lb of alloy; ton lots 18.0c; less ton lots 19.50c, f.o.b. Niagara Falls, N. Y.; freight allowed to St. Louis.

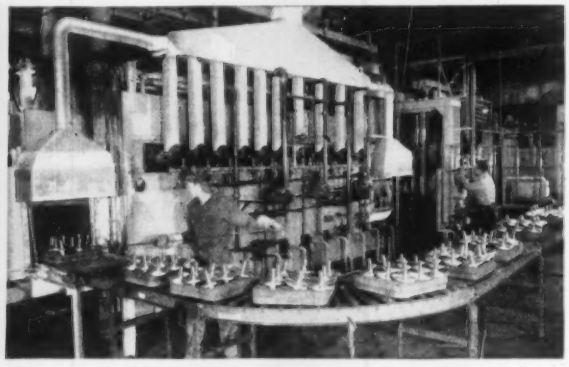
V-5 Foundry Alloy: (Cr 38-42%, Si 17-19%, Mn 8-11%). C.l. packed, 14.25c per lb of alloy; ton lots 15.75c; less ton lots 17.00c, f.o.b., Niagara Falls, N. Y.; freight allowed to St. Louis.

Simanal: (Approx 20% each Si, Mn, Al; bal. Fe) Lump, carload, bulk 14.50c, packed 15.50c; ton lots, packed, 15.75c; less ton lots, packed, 16.25c per lb of alloy, delivered to destination within United States.

Ferrophosphorus: (23-25% based on 24%, P content with unitage of $3 for each 1% of P above or below the base); carloads, f.o.b. seller's works, Mt. Pleasant, or Sigio, Tenn., $65 per gross ton.

Ferromolybdenum: (55-75%). Per lb, contained Mo, f.o.b. Langeloth, $1.32; Washington, Pa., furnace, any quantity $1.13.

Technical Molybdic-Oxide: Per lb, contained Mo., f.o.b. Langeloth $1.14, packed in bags containing 20 lb of molybdenum; Washington, Pa., 95.00c.



Gas Carburizing
and other heat processing

● The American Iron and Machine Works Company, of Oklahoma City, is heat treating and gas carburizing several different parts — requiring different cycles — in the equipment pictured above which consists of an EF gas-fired radiant tube pusher type furnace, equipped with endothermic gas generator, automatic quench, oil conditioner, heat exchanger, washing machine and draw furnace.

The user reports a greatly improved product, much improved production control and decreased costs. Let the EF engineers, with their wide experience in all fields of heat treating, work with you on your next job.

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CONSTRUCTION—ENTERPRISE—ORGANIZATIONAL CHANGES

Arizona

AiResearch Mfg. Co., Los Angeles, will build a $1.5 million plant in Phoenix, Ariz. To be called the AiResearch Mfg. Co. of Arizona, the plant is designed for future expansion. Completion is scheduled by June.

Alabama

T. R. Miller Mill Co. is building a $750,000 plant for the production of wire-bound boxes. Rust Engineering Co., Pittsburgh, is the designer-constructor.

California

Worthington Pump & Machinery Corp., Harrison, N. J., will operate the recently acquired Wintroath Pumps Inc., Alhambra, Calif., as a wholly owned subsidiary. The Wintroath organization will continue with Boyd Kern remaining as president.

California

S. C. Johnson & Son Inc., Racine, Wis., will build a $200,000 office and warehouse in Los Angeles. Completion is scheduled by March. Planned for future construction is a branch plant, that city.

California

Republic Heater Corp., Huntington Park, Calif., started construction of a $1 million plant in the Los Angeles Airport Industrial Tract. The firm makes gas heaters, gas floor furnaces, circulating wall heaters, air-conditioning units and water softeners. Completion is scheduled by April.

Delaware

Ferro Inc., engaged in the export and import of iron and and steel, was chartered by the secretary of state's office at Dover, Del. Corporation Service Co., Wilmington, Del., is serving as the principal office.

Illinois

United Drill & Tool Corp., Chicago, contemplates the erection of a plant in Niles, Ill., to cost about $1,750,000. It has a site of 15 acres.

Illinois

International Minerals & Chemical Corp., Chicago, plans to build a $500,000 research laboratory at Skokie, Ill.

Illinois

Barber Greene Co., Aurora, Ill., awarded the contract for erection of a factory addition to Campbell-Lowrie & Lautermilch, Chicago, at $300,000. The company makes mixers and materials handling equipment.

Illinois

Clearing Industrial District, Chicago, has the general contract on a $350,000 factory to be erected in Melrose Park, Ill., for **Miller Motor Co.,** Chicago. John S. Cromelin, Chicago, is the architect.

Indiana

American Steel Foundries, Chicago, is purchasing 95 per cent of the outstanding capital stock of Diamond Chain Co., Indianapolis, for about $8 million. In acquiring the manufacturer of roller chains for all types of equipment, American will operate Diamond Chain as a subsidiary.

Kansas

Standard Oil Co. of Indiana, Chicago, contemplates a $2.5 million expansion program for its refinery in Neodesha, Kans.

Massachusetts

Tracerlab Inc., Boston, plans to build a plant at West Concord, Mass., to house its engineering and manufacturing operations as well as certain phases of its radiochemical program. The company manufactures in assembly line quantities instruments for civilian defense against atomic attack.

Montana

Montana Sheet Metal Contractors Inc. was organized in Helena, Mont., to "aid and inform the industry." Theodore Carson, Helena, is president. Associated with him are John McNutt, Helena, and J. R. Klemens, Great Falls, Mont.

New Jersey

Champlain Co. Inc., Bloomfield, N. J., is the new owner of Pickering Governor Co., Portland, Conn., operated for the past year as a division of Hartford Empire Co. Manufacture, sales and service operations are being moved to the Champlain plant in Bloomfield. Pickering is a manufacturer of mechanical and hydraulic governors for steam engines and turbines, gasoline and diesel engines.

New York

General Electric Co., Schenectady, N. Y., purchased a

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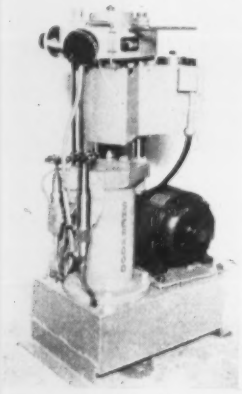

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major part of Union Bag & Paper Corp.'s Hudson Falls, N. Y., plant facilities. The property will be used to increase General Electric's facilities for manufacturing capacitors. Union Bag has concentrated its manufacturing operations at Fenimore, N. Y., and also operates a plant at Savannah, Ga.

Ohio

B. F. **Goodrich Co.,** Akron, will build a $2.5 million plant near Marion, O., for making of industrial rubber products.

Ohio

Thompson Products Inc., Cleveland, automotive and aircraft engine parts, plans a $13 million expansion of its Aircraft Division. Included in the project, scheduled to be completed by the third quarter, is $4,930,000 for tools and equipment for which the company has been granted accelerated depreciation. In addition to the $13 million expansion to be financed by the company, further expenditures of several million dollars will be made by the Army and Navy for facilities at the company's Tapco factory in Euclid, O., and downtown Cleveland plant.

Pennsylvania

Worthington Pump & Machinery Corp., Harrison, N. J., purchased the land, buildings and equipment of National Transit Pump & Machine Co. in Oil City, Pa. Worthington expects to take possession of the property early next month and will commence production of equipment for the national defense program at that time. Worthington has purchased some of the former owner's inventory and is in a position to furnish repair and spare parts for National Transit Pump & Machine Co. products.

Washington

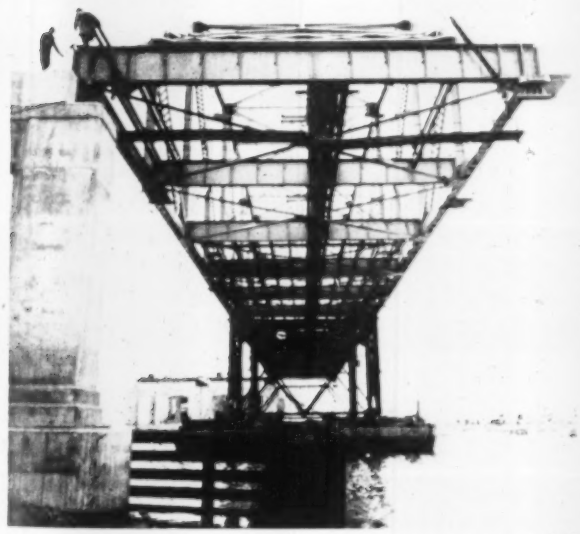
L. H. Hoffman Co., Portland, Oreg., is reported low at $2,473,000 for schedule No. 1 and $2,555,000 for schedule No. 2, involving five steel and concrete structures to General Electric Co., Schenectady, N. Y., as prime contractor for **Atomic Energy Commission.** Bids are said to be 13 per cent above estimates for the Hanford, Wash., project.

Washington

George Buckler Co., Portland, Oreg., has the contract to build a $3 million plant in Vancouver, Wash., for **Electro-Chemical Co.,** Buffalo. Plant will produce hydrogen peroxide.

Wisconsin

Construction has started on another addition to the plant of the **Louis Allis Co.,** Milwaukee, manufacturer of electric motors. The addition, scheduled to be completed by Mar. 1, together with research and test facilities to be installed, will cost about $400,000. Klug & Smith Co., Milwaukee, is the contractor.



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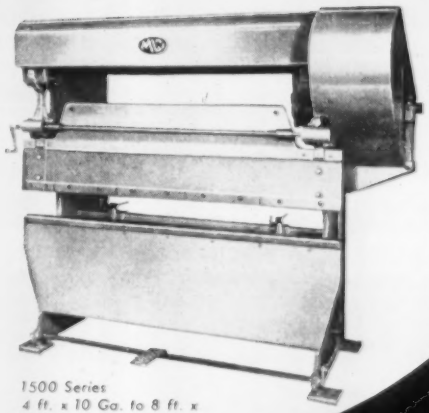

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